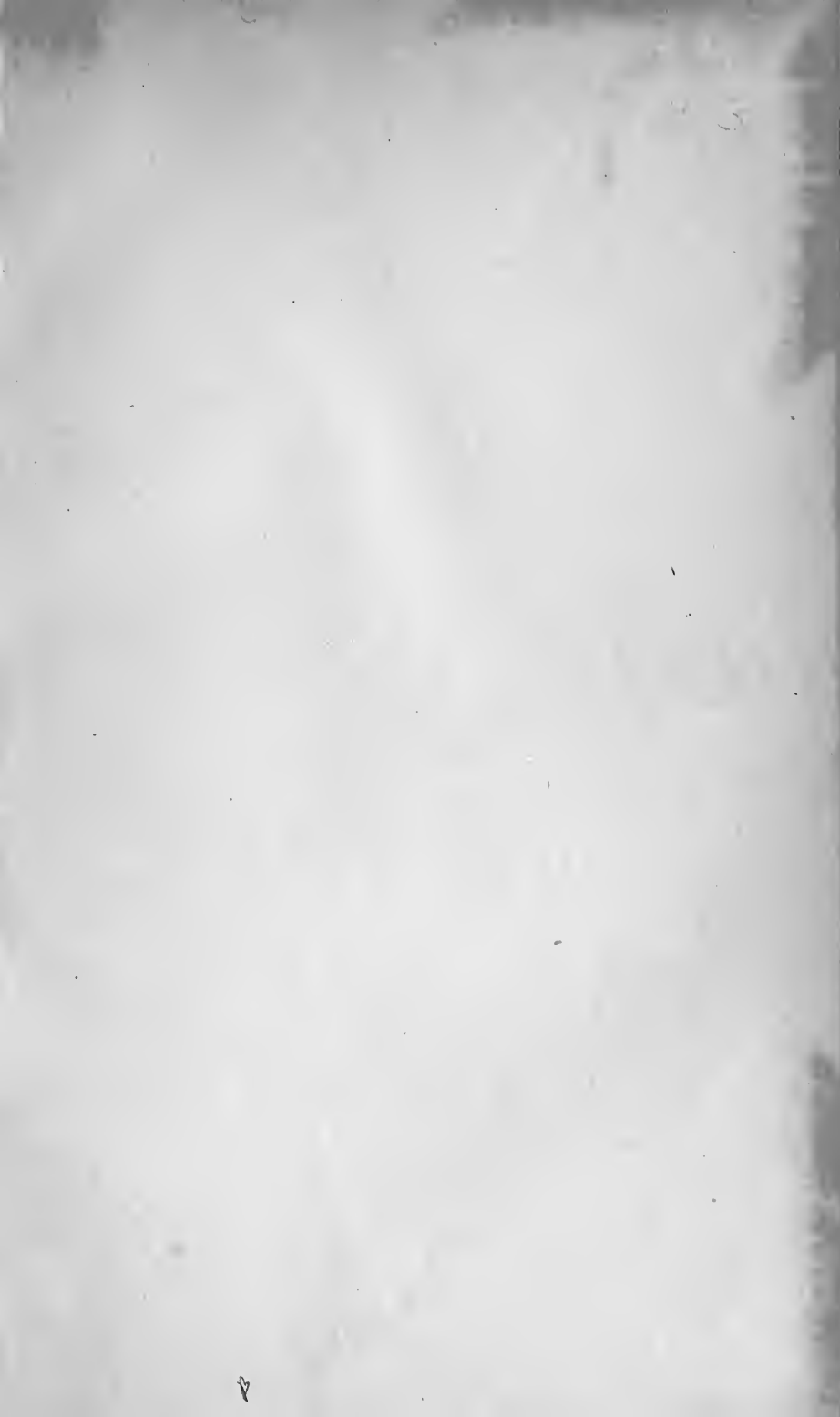






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# Avicultural Magazine,

BEING THE JOURNAL OF  
THE AVICULTURAL SOCIETY  
FOR THE STUDY OF  
FOREIGN AND BRITISH BIRDS  
IN FREEDOM AND CAPTIVITY.

EDITED BY  
DAVID SETH-SMITH, F.Z.S., M.B.O.U.  
—AND—  
ARTHUR G. BUTLER, PH.D., F.Z.S.

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Owing to an unfortunate oversight the numbering of pp. 269 and 270 has been duplicated; readers are therefore requested to mark the first two pages of the article on "The White-bellied Amethyst Starling" 269\* and 270\*.

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Alter from "male" to "female":—

Page 207, lines 21, 30, and 33.

„ 208, „ 2, 2, 6, and 10.

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Alter from "female" to "male":—

Page 207, lines 22 and 30.

„ 208, „ 2, 6, and 36.

„ 209, „ 4 and 29.

## REPORT OF THE COUNCIL

FOR THE YEAR 1907-8.

Once more we have come to the close of our Society's year and to the completion of another volume of our Magazine, and we think that our members may congratulate themselves that Volume VI. of the New Series is equal to any of its predecessors. Many articles of great interest and value have appeared, and we are glad to notice amongst the contributors several who have not previously written for our journal.

Seven coloured plates by Mr. HERBERT GOODCHILD, and numerous black and white plates and text figures have been published, the illustrations being on the whole quite equal, if not superior, to those which have previously appeared in this journal.

In the pages of the present volume mention is made of many species of birds which have been imported alive for the first time this year; and accounts are published of the breeding in captivity of several species which had not previously been known to rear young in the United Kingdom.

We are glad to be able to report that the Society is in a sound and prosperous condition, and that the membership continues to increase in a very satisfactory manner.

Our best thanks are due to those members who, by their contributions to our pages or in other ways, have helped to make the present volume a success. Especially we are indebted to Dr. A. G. BUTLER for very kindly undertaking the Editorship, in addition to his duties as Honorary Correspondence Secretary, during the absence from England of Mr. SETH-SMITH.

*Signed for the Council,*

T. H. NEWMAN, *Hon. Business Secretary.*

D. SETH-SMITH, *Hon. Editor.*



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---

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(Continued on page iii. of cover).

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- BROMET, Mrs. HENRY; Highfield, Tadcaster. (Oct., 1903).
- BROOK, E. J.; Hoddum Castle, Ecclefechan, N.B. (August, 1905).
- 60 BROTHERSTON, G. M.; 18, St. John Street, Edinburgh. (Feb., 1895; dormant 1901-5).
- BROWNING, WILLIAM H.; 18, West 54th Street, New York City. (March, 1906).
- BUBB, Miss; Ullenwood, near Cheltenham. (June, 1904).
- BULKLEY, The Lady MAGDALEN WILLIAMS; 24A, Portland Place, W. (Nov., 1906).
- BURGE, SAMUEL; Ivy Cottage, Fairford. (November, 1896).
- BURGESS, H. W.; Mole Villa, Belmont Road, Leatherhead, Surrey. (Nov., 1900).
- BURNETT-STUART, GEORGE E.; Ministry of Finance, Cairo. (Dec., 1906).
- BURTON, WALTER; Moorefort, East Sheen, Mortlake, S.W. (Dec. 1901).
- BUTLER, ARTHUR G., Ph.D., F.L.S., F.Z.S., M.B.O.U. (*Hon. Correspondence Secretary*); 124, Beckenham Road, Beckenham, Kent. (Orig. Mem.)\*
- BUTLER, A. L., F.Z.S., M.B.O.U.; Superintendent of Game Preservation, Khartoum, Soudan. (Aug., 1906).
- 70 BUTLER, ARTHUR LARCHIN, M. Aust. O. U.; Waimarie, Lower Sandy Bay, Hobart, Tasmania. (July, 1905).
- BUTLER, Colonel SOMERSET J.; Kilmurry, Thomastown, co. Kilkenny. (June, 1904).
- BÜTTIKOFER, Dr. J., C.M.Z.S., M.B.O.U.; Director of the Zoological Gardens, Rotterdam, Holland. (Oct., 1907). (*Hon. Member*).
- CAMPBELL, The Hon. IAN, M.; Stockpole, Pembroke. (Dec., 1905).
- CAMPS, H. T. T., F.Z.S.; Linden House, Haddenham, Isle of Ely. (Orig. Mem.)\*
- CAPERN, F., 53, Redland Road, Bristol. (March, 1903).
- CARLYON, Mrs.; The Rise, Brockenhurst, Hants. (Dec., 1900).
- CARPENTER, The Hon. Mrs.; 22, Grosvenor Road, S.W. (Feb., 1898).

- CARRICK, GEORGE; 13, King's Terrace, Maryhill, Glasgow. (March, 1898).
- CASTELLAN, VICTOR E.; Hare Hall, Romford, Essex. (Orig. Mem.)
- 80 CASTELL, Mrs. G. B.; Fleetwood Cottage, Rye, Sussex, and Villa Stella, via Montebello, Rapallo, Riviera di Levante. (Dec., 1906).
- CASTLE-SLOANE, C., F.Z.S.; Oat Hall, near Crawley, Sussex. (March, 1900).
- CATTLE, C. F.; Thurston, Bury St. Edmunds. (Jan., 1905).
- CECIL, The Lady WILLIAM; Hummanby Hall, Filey, Yorkshire. (Feb., 1901).
- CHAPMAN, P. GODFREY; 21, Lennox Gardens, S.W. (Oct., 1898).
- CHARRINGTON, Mrs. C.; Frensham Hill, Farnham, Surrey. (Jan., 1907).
- CHARRINGTON, Mrs. MOWBRAY; How Green, Hever, Edenbridge, Kent. (May, 1896).
- CHATWIN, HERBERT F.; 23, King Street, Nottingham. (Jan., 1902).
- CHAWNER, Miss; Forest Bank, Lyndhurst, Hants. (July, 1899).
- CLITHEROW, Mrs. CLAUD STRACEY; 20, Park Square, Regent's Park, N.W. (June, 1903).
- 90 CLOSE, Mrs. M. FARNHAM; 17, The Causeway, Horsham. (Feb., 1906).
- COCKELL, NORMAN FORBES; 21, Camac Street, Calcutta, India. (Nov., 1905).
- CONNELL, Mrs. KNATCHBULL; The Orchard, Brockenhurst, Hants. (Nov., 1897).
- CONSTABLE, The Rev. W. J.; Uppingham School, Uppingham. (Sept., 1901; dormant 1905-6).
- CONYNGHAM, The Dowager Marchioness; 36, Belgrave Square, S.W. (Jan., 1900).
- COOKSON, KENNETH; Oakwood, Wylam, R. S. O., Northumberland. (Nov., 1906).
- COOPER, JAMES; Killerby Hall, Scarborough. (Orig. Mem.)
- COOPER, WILLIAM; Aislaby Hall, Pickering, Yorks. (March, 1907).
- CORBET, Lady NINA; Acton Reynald, Shrewsbury. (Oct., 1905).
- CORY, REGINALD R.; Duffryn, near Cardiff. (August, 1905).
- 100 COXWELL-ROGERS, Miss; Park Gate, Cheltenham. (Dec., 1895).
- CRESSWELL, O. ERNEST, M.A., J.P.; Morney Cross, near Hereford. (Orig. Mem.)
- CRESWELL, WILLIAM GEORGE, M.D., F.Z.S.; Eden Lodge, Kingston-on-Thames. (June, 1900).
- CROFT, A. B.; The Clock House, Ashford, Middlesex. (May, 1907).
- CRONKSHAW, J.; 218, Burnley Road, Accrington. (Dec., 1894).
- CROWFOOT, Miss ELLEN M.; Blyburgate House, Beccles. (Sept., 1904).
- CUMMINGS, A.; 16, Promenade Villas, Cheltenham. (Dec. 1896).
- CURREY, Mrs.; The Pit House, Ewell, Surrey. (Feb., 1906).
- CUSHNY, CHARLES; The Bath Club, 34, Dover Street, Piccadilly, W. (June, 1906).
- DAIGLIESH, GORDON; Brook Witley, near Godalming, Surrey. (Oct., 1906).

- 110 DART, HENRY; 42, Broomfield Road, Tolworth, near Surbiton. (May, 1903).  
 DAVIES, AMOS; 'Tour House, Audenshaw, near Manchester. (Jan., 1906).  
 DAWNAY, The Lady ADELAIDE; Brampton House, Northampton. (July, 1903).  
 DELL, CHARLES; 12, High Street, Harlesden, N.W. (July, 1900).  
 DE MANCHA, JOSE M.; 1, Gledhowe Gardens, Earl's Court, S.W. (Oct., 1902).  
 DENNIS, Mrs. H. E.; The Beeches, Fay Gate, Sussex. (March, 1903).  
 DENT, Mrs.; Curraghmore, Cavendish Road, Bournemouth. (Mar., 1907).  
 DE TAINTÉGNIES, La Baronne, Le Clément; Cleveland, Minehead, Somerset. (Feb., 1902).  
 D'EVELYN, Dr. FREDERICK W., Pres. G. S. Cal., etc. etc.; 2103, Clinton Avenue, Alameda, California, U.S.A. (June, 1906).  
 DEWAR, D., I.C.S.; Lahore, India. (Sept., 1905).  
 120 DEWING, Miss; Rougham House, Bury St. Edmunds, (Sept., 1906).  
 DE WINTON, WILLIAM EDWARD, F.Z.S., M.B.O.U.; Orielton, Pembroke. (August, 1903).  
 DONALD, C. H.; c/o Punjab Banking Company, Ltd., Lahore, India. (March, 1906).  
 DOUGLAS, Miss; Rose Mount, Pitlochry, N.B. (June, 1905).  
 DOUGLAS, WILLIAM C., F.Z.S.; 9, Trebovir Road, Earl's Court, S.W. (Nov., 1900).  
 DREWITT, FREDERICK DAWTREY, M.A., M.D., F.R.C.P., F.Z.S., M.B.O.U.; 14, Palace Gardens Terrace, Kensington, W. (May, 1903).  
 DRUMMOND, HAY, Colonel R; 2nd Coldstream Guards; Seggieden-by-Perth. (July, 1907).  
 DRUMMOND, Miss; Mains of Megginch, Errol, N.B. (Feb., 1905).  
 DUFF, The Lady GRANT; 11, Chelsea Embankment, S.W. (Aug., 1905).  
 DUNLEATH, The Lady; Ballywalter Park, Ballywalter, co. Down, Ireland. (August, 1897).  
 130 DUNSANY, The Lady; Dunstall Priory, Shoreham-by-Sevenoaks, Kent. (Feb., 1902).  
 DUTTON, The Hon. and Rev. Canon; Bibury, Fairford. (Orig. Mem.)  
 EDWARDS, G.; 377, Coldharbour Lane, Brixton, S.W. (August, 1902).  
 EDWARDS, STANLEY, B.A., F.Z.S.; c/o E. B. Trotter, Esq., 64, Victoria Street, Westminster, S.W. (Sept., 1906).  
 EZRA, DAVID; 59, Ezra Street, Calcutta. (June, 1902).  
 FANSHAW, Capt. R. D.; Adbury Holt, Newbury, Berks. (Aug., 1907).  
 FARMBOROUGH, PERCY W., F.Z.S.; Lower Edmonton. (June, 1896).  
 FARRAR, The Rev. C. D.; Mickelfield Vicarage, Leeds. (Jan., 1895).  
 FASEY, WILLIAM R.; The Oaks, Holly Bush Hill, Snaresbrook, N.E. (May, 1902).  
 FEILDING, The Lady LOUISA; Broome Park, Betchworth, Surrey. (July, 1902).

- 140 FIELD, GEORGE; Sorrento, Staplehurst, Kent. (March, 1900).  
 FILLMER, HORATIO R.; Brendon, Harrington Road, Brighton. (Dec., 1903).  
 FINN, FRANK, B.A., F.Z.S., M.B.O.U.; 29, Chalcot Crescent, Primrose Hill, London, N.W. (March, 1895).  
 FLOWER, Capt. STANLEY S., F.Z.S., M.B.O.U.; Director, Egyptian Government Zoological Gardens; Ghizeh (Giza), Cairo. (Jan., 1903).  
 FOLLETT, The Lady JULIA; Woodside, Old Windsor. (Oct., 1903).  
 FORTUNE, RILEY, F.Z.S.; Lindesfarne, Dragon Road, Harrogate. (Nov., 1906).  
 FOSTER, WM. HILL; 164, Portland Street, Southport. Jan., 1902).  
 FOTHERGILL, Major HENRY, J.P.; Copt Hall, Hawkhurst. (April, 1900).  
 FOWLER, CHARLES; 26, Broad Street, Blaenavon. (Dec., 1894).  
 GALLOWAY, P. F. M.; Durban, St. Peter's Avenue, Caversham, Reading. (March, 1907).  
 150 GIBBS, Mrs. H. MARTIN; Barrow Court, Flax Bourton, R.S.O., Somerset. (April, 1904).  
 GIBBINS, WILLIAM B.; Ettington, near Stratford-on-Avon. (June, 1895).  
 GILES, HENRY M., M. Aust. O. U. (Orig. Mem.); Zoological Gardens, Perth, Western Australia. (June, 1903).  
 GILL, ARTHUR, M.R.C.V.S.; Veterinary Establishment, Bexley Heath, Kent. (Dec., 1899).  
 GILROY, NORMAN, M.B.O.U.; 95, Claremont Road, Forest Gate, E. (July, 1906).  
 GLADSTONE, Miss J.; The Lodge, Parkstone, Dorset. (July, 1905).  
 GODDARD, H. E.; Rothsay, Thicket Road, Sutton, Surrey. (Feb., 1899).  
 GODMAN, F. DUCANE, B.C.L., F.R.S., F.Z.S., President of the British Ornithologists' Union; 45, Pont Street, S.W. (Oct., 1904). (*Honorary Member*).  
 GOODALL, J. M.; 52, Oxford Gardens, N. Kensington, London, W. (July, 1905).  
 GOODCHILD, HERBERT, M.B.O.U.; 66, Gloucester Road, Regent's Park, N.W. (Oct., 1902).  
 160 GOODFELLOW, WALTER, M.B.O.U.; Montrose, New Park Road, West Southbourne, Hants. (June, 1897).  
 GORTER, Madame; The Delta, Walmer, Kent. (Nov., 1901).  
 GOW, J. BARNETT; 21, West Nile Street, Glasgow, and Ledcameroch, Bearsden, Glasgow. (Feb., 1906).  
 GRABOWSKY, F., Director of the Zoological Gardens; Breslau, Germany. (June, 1905).  
 GRAY, HENRY, M.R.C.V.S.; 23, Upper Phillimore Place, W. (June, 1906).  
 GREGORY, AUBREY; Gopalichuck, Jherriah, F.I.R., India. (Nov., 1902).  
 GREGORY, Mrs.; Melville, Parkstone, Dorset. (Dec., 1901).  
 GRIFFITHS, M. E.; 4, Temple Road, Stowmarket. (May, 1902).  
 GRISCOM, LUDLOW; 21, Washington Square North, New York City, U.S.A. (April, 1905).



- GRÖNVOLD, HENRIK; 26, Albert Bridge Road, Battersea Park, S.W. (Nov., 1902).
- 170 GUILFORD, Miss H.; 23, Lenton Avenue, The Park, Nottingham. (March, 1903).
- GÜNNING, Dr. J. W. B., F.Z.S., Director of the Transvaal Museum and Zoological Gardens; Pretoria, South Africa. (Sept., 1906).
- GÜNTHER, ALBERT, M.A., M.D., Ph.D., F.R.S., F.Z.S., M.B.O.U.; 2, Lichfield Road, Kew Gardens. (Sept., 1902). (*Honorary Member*).
- GUNTHER, ROBERT L.; Park Wood, Englefield Green, Surrey. (August, 1904).
- GURNEY, JOHN HENRY, F.Z.S., M.B.O.U.; Keswick Hall, Norwich; and Athenæum Club, Pall Mall, S.W. (Dec., 1904).
- HAAGNER, A. K., F.Z.S., M.B.O.U., Hon. Sec. S. African Ornithological Union; Dynamite Factory, Modderfontein, Transvaal. (Nov., 1905).
- HAMILTON, Madame; Les Deux Parzes, Champéry, (Valaise), Switzerland. (Nov., 1902).
- HAMILTON, Miss; 2, Upper Wimpole Street, W. (April, 1902).
- HARDING, W. A., F.Z.S.; Histon Manor, Cambridge. (Dec., 1903).
- HARDING, W.; The Duke of Edinburgh Hotel, 85 & 87, Kingston Road, Wimbledon. (August, 1903).
- 180 HARDY, LAWRENCE, M. P.; Sandling Park, Hythe, Kent. (Nov., 1906).
- HAREWOOD, The Countess of; Harewood House, Leeds. (March, 1903).
- HARPER, Miss; 55, Waterloo Road, Bedford. (March, 1902).
- HARPER, EDWARD WILLIAM, F.Z.S., M.B.O.U.; 55, Waterloo Road, Bedford. (Feb., 1901).
- HARRISON, J. H.; 18, East Beach, Lytham. (Sept., 1906).
- HARTLEY, Mrs.; St. Helen's Lodge, Hastings. (April, 1897).
- HARVEY, The Hon. Lady; Langley Park, Slough. (Oct., 1906).
- HAWKE, The Hon. MARY C.; Wighill Park, Tadcaster. (Nov., 1900).
- HAWKINS, L. W.; Estrilda, 206, Clive Road, West Dulwich, S.E. (Jan., 1899).
- HAZELERIGG, Sir ARTHUR; Noseley Hall, Leicester. (Mar., 1907).
- 190 HEMSWORTH, The Rev. B., M.A., J.P.; Monk Fryston Hall, South Milford, Yorks. (June, 1901).
- HEWITT, H. C.; Hope End, Ledbury, Herefordshire. (Jan., 1905).
- HILL, Mrs. E. STAVELEY; Oxley Manor, Wolverhampton. (Oct., 1905).
- HINCKES, R. T.; Foxley, Hereford. (Feb., 1899).
- HINDLE, R. FRANKLIN; 34, Brunswick Road, Liverpool. (Sept., 1898).
- HOBSON, F. G.; Villa Delta, Beverley. (May, 1905).
- HOCKEN, Dr.; Dunedin, New Zealand. (Jan., 1904).
- HODGSON, The Hon. Mrs.; Clopton, Stratford-on-Avon. (March, 1903).
- HODGSON, RICHARD, Jun.; Molescroft, Beverley. (Feb., 1903).
- HOLDEN, Ralph A.; 5, John Street, Bedford Row, London. (May, 1906).
- 200 HOLT, EARDLEY-WILMOT BLOMFELD, F.L.S., F.Z.S.; Ashurstwood House, East Grinstead. (Dec., 1904).
- HOPKINSON, EMILIUS, D.S.O., M.A., M.B. Oxon.; 45, Sussex Square, Brighton, and Bathurst, Gambia, West Africa. (October, 1906).

- HOPSON, FRED C.; Northbrook Street, Newbury. (March, 1897).
- HORSBRUGH, Capt. BOYD R., A.S.C.; Cantonments, Potchefstroom, Transvaal, S. Africa. (Jan., 1898).
- HORSBRUGH, C. B.; 7, Kensington, Bath. (June, 1905).
- HORTON, LEONARD W.; Hill House, Compton, Wolverhampton. (Feb., 1902).
- HOUDEN, JAMES B.; Brooklyn, Cator Road, Sydenham, S.E. (Orig. Mem.)
- HOWARD, ROBERT JAMES, M.B.O.U.; Shear Bank, Blackburn. (April, 1903).
- HOWARD-VYSE, H.; Stoke Place, Slough. (Nov., 1906).
- HOWMAN, Miss; Sherwood, 6, Essex Grove, Upper Norwood. (March, 1897).
- 210 HOYLE, Mrs.; The Vicarage, Stoke Poges, Bucks. (Nov., 1904).
- HUBBARD, GEORGE; 112, Fenchurch Street, E.C. (Jan., 1905).
- HUBBARD, The Hon. ROSE; Seven Gables, Winslow, Bucks. (Dec. 1895; dormant 1897-1906).
- HUGHES, Lady; Shelsley Grange, Worcester. (Nov., 1904).
- HUMPHREYS, RUSSELL; Sonthborough, Bickley, Kent. (April, 1896).
- HUNTERS, FRANK; 7, York Place, Edinburgh, and Knockhill, Ecclefechan. (Feb., 1906).
- HUSBAND, Miss; Clifton View, York. (Feb., 1896).
- HUTCHINSON, Miss ALICE; Alderton Vicarage, Chippenham, Wilts. (August, 1907).
- INCHQUIN, The Lady; Dromoland Castle, Newmarket-on-Fergus, County Clare, Ireland. (Nov., 1897).
- INGLIS, CHARLES M.; Boghowni Factory, Laheria Serai, P.O., Tirhoot State Railway, India. (Sept., 1902).
- 220 INGRAM, COLLINGWOOD; The Bungalow, Westgate-on-Sea. (Oct., 1905).
- INGRAM, Sir WILLIAM, Bart.; 65, Cromwell Road, London, S.W. (Sept., 1904).
- INNES, Bey, Dr. FRANCIS WALTER, M.B.O.U.; Curator Zoological Museum, Government School of Medicine, Cairo, Egypt. (March, 1903).
- ISAAC, CHARLES; Somerton, Bath Road, Slough. (March, 1906).
- IVENS, Miss; Moss Bank, Greenford Avenue, Hanwell, Middlesex. (August, 1903).
- JARDINE, Miss EMILY; Zungeru, Northern Nigeria, West Africa. (Jan., 1903).
- JOHNSTONE, Mrs. E. J.; Burrswood, Groombridge, Kent. (May, 1900).
- JONES, H.; 13, Commercial Road, Ipswich. (Oct., 1903).
- JONES, Major H.; East Wickham House, Welling, Kent. (Jan., 1906).
- KEMP, ROBERT; c/o Mrs. Warner, Long Sutton, near Langport, Somersetshire. (March, 1903).
- 230 KENNEDY, EWEN; The Leuchold, Dalmeny Park, Edinburgh. (Feb., 1907).
- KERR, N.; Primrose Club, Park Place, London, W. (Oct., 1906).

- KEYTEL, P. CASPER; Box 633, Cape Town, South Africa. (June, 1902).
- LANCASTER, JOHN; Overslade, near Rugby. (March, 1904).
- LANCASTER, Mrs. H. R.; 7, Victoria Terrace, Walsall. (Aug., 1897).
- LASCELLS, The Hon. GERALD, F.Z.S., M.B.O.U.; The King's House, Lyndhurst. (Oct., 1896).
- LAWSON, Mrs. F. W.; Adel, Leeds. (Nov., 1903).
- LEE, Mrs. E. D.; Hartwell House, Aylesbury. (July, 1906).
- LEIGH, CECIL; Lyburn Park, near Lyndhurst, Hants. (Nov., 1906).
- LENNIE, J. C.; Rose Park, Trinity Road, Edinburgh. (Orig. Mem.)\*
- 240 LEWIS, W. JARRETT; Corstorphine, Ryde, I. of W. (Oct., 1904).
- LIBRARY OF PRINCETON UNIVERSITY, Princeton, New York. (Nov., 1907).
- LIEBERT, RICHARD O.; Hylands, Chelmsford. (Nov., 1906).
- LILFORD, The Lady; Lilford Hall, Oundle, Northamptonshire. (Jan., 1898).
- LITTLE, GEO. W., M.D.; 47, Ridge Street, Glens Fall, N.Y., United States of America. (Oct., 1903).
- LITTLE, Miss C. ROSA; Baronshalt, The Barons, East Twickenham, Surrey. (May, 1907).
- LLEWELYN, Sir JOHN T. DILLWYN, Bart., M.A., D.L., F.Z.S.; Penllergaer, Swansea. (May, 1903).
- LOCKYER, ALFRED; Ashbourne, Selsden Road, Wanstead. (Dec., 1905).
- LODGE, GEORGE E., F.Z.S., M.B.O.U.; The Studios, 5, Thurloe Square, S.W. (Aug., 1905).
- LONG, Mrs.; Sherrington Manor, Berwick, Sussex. (Feb., 1907).
- 250 LOVELACE, The Countess of; Wentworth House, Chelsea Embankment, London, S.W. (May, 1906).
- LYON, Miss K.; Harwood, Horsham. (Nov., 1894).
- MACCALL, Miss; The Rest, Church Crookham, Fleet, R.S.O., Hants. (May, 1904; dormant).
- MCDONALD, Miss BERYL; Meadow Bank, St. Leonards-on-Sea. (Dec., 1906).
- MCLEAN, COLIN; The Heath, East Dereham, Norfolk. (Nov., 1906).
- MARCHANT, WALTER; Weston Bank, Weston-under-Lizard, Shifnal. (July, 1907).
- MARSHALL, Mrs.; Ashley Warren, Walton-on-Thames. (April, 1906).
- MARSHALL, ARCHIBALD MCLEAN; Bleaton Hallet, Blairgowrie, Perthshire, N.B. (Jan., 1906).
- MARTIN, H. C.; 178, Victoria Road, Old Charlton, Kent; and Saladero Liebig, Fray Bentos, Uruguay. (Jan., 1897).
- MARTORELLI, Dr. GIACINTO, M.B.O.U., etc.; Collezione Turati, Museo Civico di Storia Naturale, Milan, Italy. (July, 1906). (*Honorary Member*).
- 260 MEADE-WALDO, E. G. B., F.Z.S., M.B.O.U.; Stonewall Park, Edenbridge, Kent. (Jan., 1895).
- MELLOR, Mrs.; Fair Lawii, Lytham, Lancs. (March, 1904).
- MICHELL, Mrs.; Crakehall, Bedale. (Sept., 1898).

- MILLER, TINNISWOOD; 27, Belgrave Road, S.W. (March, 1905).  
 MITCHELL, HARRY; The Duchy House, Harrogate. (Feb., 1904).  
 MITCHELL, P. CHALMERS, M.A., D.Sc., F.R.S., Secretary to the Zoological Society of London; 3, Hanover Square, W. (Aug., 1905).  
 MOERSCHHELL, F.; Imperial Hotel, Malvern. (June, 1895).  
 MOMBER, Lt.-Col. G. A., F.Z.S.; La Junia, San Remo, Italy. (Sept., 1907).  
 MONTAGU, E. S., M.B.O.U.; Trinity College, Cambridge, and 12, Kensington Palace Gardens, W. (May, 1905).  
 MOORE, WM. FAWCETT; Ballyanchor Poultry Farm, Lismore, co. Waterford. (Aug., 1903).  
 270 MORSEHEAD, Lady; Forest Lodge, Binfield, Bracknell, Berks. (Dec., 1894).\*  
 MORTIMER, Mrs.; Wigmore, Holmwood, Surrey. (Orig. Mem.)\*  
 MURRAY, JOHN, 25, Glasgow Street, Ardrossan. (March, 1903).  
 MYLAN, JAS. GEORGE, B.A., M.B. (Univ. Cal.); L.R.C.P. & L.R.C.S. (Ed.) &c., 90, Upper Hanover Street, Sheffield. (Dec., 1901).  
 NEWALL, Miss V. F.; Ellingham House, Cheltenham. (March, 1905).  
 NEWMAN, T. H., F.Z.S., M.B.O.U.; Newlands, Harrowdene Road, Wembley, Middlesex. (*Hon. Business Secretary*). (May, 1900).  
 NICHOLS, WALTER B., M.B.O.U.; Stour Lodge, Bradfield, Manningtree. (Jan., 1907).  
 NICOLL, MICHAEL J., M.B.O.U.; Zoological Gardens, Giza, Cairo, Egypt. (July, 1906).  
 NICHOLSON, ALFRED E.; Blenheim, Forth View Terrace, Blackhall, Midlothian. (Oct., 1896).\*  
 NOBLE, Mrs.; Park Place, Henley-on-Thames. (Oct., 1900).  
 280 NORWOOD, EILE; 28, St. Stephen's Mansions, Smith Square, Westminster, S.W. (Aug., 1901).  
 OAKLEY, W.; 34, High Street, Leicester. (March, 1896).  
 OATES, F. W.; White House Farm, New Leeds, Leeds. (Oct., 1897).  
 OBERHOLSER, HARRY C.; 1349, Harvard Street, N.W., Washington, D. C., United States of America. (Oct., 1903).  
 ODLING, Mrs.; Duxbury, Oxford Road, Canterbury. (Aug., 1905; dormant 1906-7).  
 OGILVIE-GRANT, W. R., F.Z.S., M.B.O.U.; British Museum (Nat. Hist.), Cromwell Road, S.W. (Dec., 1903).  
 OGILVY, HENRY S. T. HAMILTON; Biel, Prestonkirk, N.B. (March, 1900).  
 OGLE, BERTRAM SAVILE, M.B.O.U.; Steeple Aston, Oxford. (Dec., 1902).  
 O'REILLY, NICHOLAS S.; 9, Royal Crescent, Ramsgate. (Dec., 1894).  
 OSTREHAN, J. ELIOTT D.; Bank House, Thame, Oxon. (April, 1903).  
 290 PAGE, WESLEY T., F.Z.S.; 6, Rylett Crescent, Shepherd's Bush, W. (May, 1897).

- PALMER, Mrs. G. W.; Marlston House, near Newbury. (Oct., 1905).
- PAM, ALBERT, F.Z.S.; 35, Chester Terrace, N.W. (Jan., 1906).
- PARKER, DUNCAN, J.P.; Clopton Hall, Woolpit, Bury St. Edmunds. (June, 1903).
- PARKIN, THOMAS, M.A., F.R.G.S., F.Z.S., M.B.O.U.; Fairseat, High Wickham, Hastings. (Oct., 1903).
- PAYNE, WALTER HENRY; Lyncombe Hill, Bath. (March, 1907).
- PEEL, Lady; Potterton Hall, Barwick-in-Elmet, Leeds. (June, 1904).
- PEIR P.; Box 504, G.P.O., Sydney; and 50, Bondi Road, Waverley, Sydney, N. S. Wales. (July, 1903).
- PENROSE, FRANK G., M.D., F.Z.S., M.B.O.U.; Wick House, Downton, Salisbury. (Dec., 1903).
- PERCIVAL, WALTER GILBEY; El Damer, Soudan. (Feb., 1902).
- 300 PERREAU, Capt. G. A., 2/4 Gurkha Rifles, Bakloh, Punjab, India. (Dec., 1903).
- PERRING, C. S. R.; Melic House, Waldegrave Road, Teddington. (Sept., 1895).
- PERRYMAN, C. W.; Bifrons, Farnborough, Hants. (March, 1902).
- PHILLIPPS, NOEL; 21, Addison Gardens, Kensington, W. (Nov., 1901).
- PHILLIPPS, REGINALD; 26, Cromwell Grove, West Kensington Park, W. (Orig. Mem.)\*
- PHILLIPPS, Mrs.; 26, Cromwell Grove, West Kensington Park, W. (Orig. Mem.)\*
- PHILLIPS, Mrs. E. LORT, F.Z.S.; 79, Cadogan Square, S.W. (April, 1907).
- PICARD, HUGH K.; 10, Sandwell Crescent, W. Hampstead, N.W. (March, 1902).
- PICKFORD, RANDOLPH JOHN; Job's Hill House, Crook, co. Durham. (Feb., 1903).
- POCOCK, R. I., F.Z.S.; Zoological Society's Gardens, Regent's Park, N.W. (Feb., 1904).
- 310 PORTER, G. C.; 38, Mill Street, Bedford. (Dec., 1901).
- POWER, Miss CONSTANCE E.; 16, Southwell Gardens, S.W. (Nov., 1906).
- POWIS, The Earl of; 45, Berkeley Square, W.: and Powis Castle, Welshpool, (April, 1902).
- PRICE, ATHELSTAN, E., M.B.O.U.; 61, Great Cumberland Place, W. (August, 1902).
- PROCTOR, Major F. W., M.B.O.U.; Downfield, Maidenhead. (May 1903).
- PYCRAFT, W. P., A.L.S., M.B.O.U., &c.; British Museum (Nat. Hist.), Cromwell Road, S.W. (Nov., 1904).
- RATHBORNE, HENRY B.; Dunsinea, Castleknock, co. Dublin. (May, 1901.)
- RAWSON, Miss; Millhouse, Halifax. (Nov., 1903; dormant).
- REID, Mrs.; Funchal, Madeira. (Feb., 1895).
- RENAUT, W. E., M.B.O.U.; 15, Grafton Square, Clapham, S.W. (April, 1897).
- 320 RICE, Captain G.; Glayquhat, Blairgowrie, N.B. (May, 1902).
- RICHARD, E.; Hotel Metropole, Brighton. (Orig. Mem.)

- RILEY, JOSEPH H.; U.S. National Museum, Washington, D.C., U.S.A. (June, 1906).
- RITCHIE, NORMAN; The Holmes, St. Boswell's, N.B. (Feb., 1903).
- ROBERT, Madam; Hartland House, Sutton, Surrey. (June, 1906).
- ROBERTS, Mrs., M. Anst. O. U.; Beaumaris, Montpelier Street, Hobart, Tasmania. (June, 1903).
- ROBERTS, Mrs. NORMAN; The Beeches, Baslow, Derbyshire. (Nov., 1907).
- RODON, Major G. S.; Dharwar, Bombay Presidency, India. (Mar., 1906).
- ROGERS, Lt.-Col. J. M., D.S.O., F.Z.S., M.B.O.U. (Late Royal Dragoons); Riverhill, Sevenoaks. (April, 1907).
- ROGERSON, A.; Fleurville, Ashford Road, Cheltenham. (Dec., 1902).
- 330 ROTCH, Mrs.; 3, Beach Lawn, Waterloo, near Liverpool. (June, 1897).
- ROTHSCHILD, The Hon. L. WALTER, M.P., D.Sc., F.Z.S., M.B.O.U.; The Museum, Tring, Herts. (Jan., 1900).
- RUDKIN, F. H.; Belton, Uppingham. (Oct. 1902).
- ST. QUINTIN, WILLIAM HERBERT, F.Z.S., M.B.O.U.; Scampston Hall, Rillington, York. (Orig. Mem.)
- ST. QUINTIN, Miss; Scampston Hall, Rillington, York. (Jan., 1902).
- SALTER, ALBERT J.; -Nevill Street, Abergavenny. (March, 1902).
- SAVAGE, A.; 3, Rue Bihorel, Bihorel, Rouen, Seine Inférieure, France. (April, 1895).
- SCHARFF, R. F., Ph.D., Secretary to the Royal Zoological Society of Ireland; Phoenix Park, Dublin. (Oct., 1905).
- SCHERREN, HENRY, F.Z.S., M.B.O.U.; 9, Cavendish Road, Harringay, N. (Dec., 1902).
- SCHWEDER, PAUL E.; Courtlands, Goring—Worthing, Sussex. (Nov., 1902).
- 340 SCLATER, PHILIP LUTLEY, M.A., D.Sc., F.R.S., M.B.O.U.; Odiham Priory, Winchfield, Hants. (Sept., 1902). (*Honorary Member*).
- SCLATER, W. L., M.A., F.Z.S., 1511, Wood Avenue, Colorado Springs, Colorado, U.S.A. (Aug., 1904).
- SCOTT, Professor WILLIAM E. D., Worthington Society, Shawnee-on-Delaware, Pennsylvania, U.S.A. (June, 1900).
- SEPPINGS, Captain J. W. H., Turf Club, Cairo, Egypt. (Sept., 1907).
- SETH-SMITH, DAVID, F.Z.S., M.B.O.U., (*Hon. Editor*); Glengarry, 14, Canning Road, Addiscombe, Surrey. (Dec., 1894).
- SETH-SMITH, LESLIE M., B.A., M.B.O.U.; Alleyne, Caterham Valley, Surrey. (July, 1902).
- SETH-SMITH, Mrs. W.; Alleyne, Caterham Valley, Surrey. (Sept., 1904).
- SHARP, Miss; Spring Gardens, Ringwood, Hants. (Orig. Mem.)
- SHARPE, RICHARD BOWDLER, J.L.D., F.L.S., F.Z.S., M.B.O.U. Assistant Keeper, Zoological Department, British Museum (Natural History); South Kensington, S.W. (Sept. 1902). (*Hon. Member*).
- SHELLY, Captain GEORGE ERNEST, F.Z.S., F.R.G.S., M.B.O.U.; 39, Egerton Gardens, South Kensington, S.W. (August, 1903).
- 350 SHEPHERD, Miss B.; The Den, Walton-on-Thames. (April, 1901).
- SHERBROOKE, Mrs. P.; Douthwaite Dale, Kirbymoorside, Yorks. (March, 1897).

- SICH, HERBERT LEONARD; c/o Rev. E. WATSON, Bepton Rectory, Midhurst, Sussex; and Corney House, Chiswick, Middlesex. (Feb., 1902).
- SILVER ALLEN; Loug Melford, Suffolk. (August, 1904).
- SIMPSON, ARCHIBALD; Blackgates House, Tingley, near Wakefield. (Feb., 1901).
- SKEA, E. M.; (Box 373), Pretoria, South Africa. (Jan., 1907).
- SLATER, ARTHUR A.; Prescot Road, St. Helen's. (Nov., 1894).
- SMITH, C. BARNBY; Woodlands, Retford. (August, 1906).
- SMITH, The Rev. JAMES, M.A.; 8, Caxton Road, Broomhill, Sheffield. (May, 1907).
- SONDES, The Earl, F.Z.S.; Lees Court, Faversham, Kent. (Aug., 1905).
- 360 SONDEIM, EDWARD; Welford House, Arkwright Road, Hampstead, N.W. (April, 1907).
- SORNBORGER, J. D.; Ipswich, Mass., U.S.A. (Oct., 1905).
- SOUTHESK, The Countess of; Kinnaird Castle, Brechin, N.B. (Feb., 1901).
- SOUTHPORT CORPORATION: W. JAMES HATHAWAY, Curator; Hesketh Park, Southport. (Jan., 1904).
- SPEED, HEDLEY; 12, Victoria Park, Bangor, Wales. (Nov., 1900).
- STANSFELD, Captain JOHN; Dunninald, Montrose, N.B. (Dec., 1896).
- STANFORTH, Mrs.; Kirk Hamerton Hall, York. (Nov., 1897).
- STARK, W. P.; Hillstead, Basingstoke. (August, 1903).
- STIRLING, Mrs. CHARLES; Old Newton House, Doune. (Sept., 1904).
- STOCKPORT CORPORATION: FRANK HARRIS, F.R.H.S., Superintendent; Vernon Park, Stockport. (Oct., 1902).
- 370 STURTON-JOHNSON, Miss; Orotava House, Ore, Hastings. (May, 1897).
- SUGGITT, ROBERT; Suggitt's Lane, Cleethorpes, Grimsby. (Dec., 1903).
- SUTCLIFFE, ALBERT; Field House, Grimsby. (Feb., 1906).
- SUTTON, Lady; Benham Park, Newbury. (Dec., 1901).
- SWAN, J. A.; Meadow View, Northcote Road, Sidcup, Kent. (June, 1902).
- SWAYSLAND, WALTER; 47, Queen's Road, Brighton. (Orig. Mem.)\*
- SWIFT, DONALD; 58, Avenue Road, Crouch End, N. (Dec., 1898).
- SWINFEN-BROWN, Mrs.; Swinfeu Hall, Lichfield. (Feb., 1898).
- TANNER, Dr. FRANK L.; Vanvert House, Guernsey. (Jan., 1904).
- TANNER, Mrs. SLINGSBY; 62, Cheyne Court, Chelsea, S.W. (Oct., 1906).
- TEMPLE, W. R.; Ormonde, Datchet, Bucks. (June, 1907).
- 380 TERRY, Major HORACE A., M.B.O.U. (late Oxfordshire Light Infantry); The Lodge, Upper Halliford, Shepperton. (Oct., 1902).
- TRESCHEMAKER, W. R., B.A.; Ringmore, Teignmouth, Devon. (May, 1904).
- THOM, A. A.; Harcourt, Leighton Buzzard. (June, 1895\*: dormant).
- THOMAS HENRY; The Vineries, Boroughbridge, York. (Jan., 1895).
- THOMAS, Miss F. G. F.; Hurworth Manor, Darlington. (March, 1899).

- THOMAS, Mrs. HAIG; Creech Grange, Wareham. (August, 1907).
- THOMAS, Mrs. W. F.; Bishopshalt, Hillingdon, Uxbridge. (Oct., 1904).
- THOMASSET, BERNARD C.; Hawkenbury, Staplehurst, Kent. (July, 1896).
- THOMASSET, H. P. Cascade Estate, Mahé, Seychelles Islands. (Nov., 1906).
- THOMPSON, Mrs. F. F.; Canandaigua, N.Y., U.S.A. (July, 1907).
- 390 THORNILEY, PERCY WRIGHT; Shooter's Hill, Wem., Shrewsbury. (Feb., 1902).
- THORPE, CHARLES; Selborne, Springfield Road, Wallington, Surrey. (Dec., 1901).
- THORPE, F. C.; Eden Villa Zoo, Hedon, Hull. (Jan., 1902).
- THURSBY, Lady; Ormerod House, Burnley. (June, 1895).\*
- TICEHURST, NORMAN FREDERIC; M.A., M.B., F.R.C.S., F.Z.S.; 35, Pevensey Road, St. Leonards-on-Sea. (Dec., 1906).
- TOMES, W., J.P.; Glenmoor, 31, Billing Road, Northampton. (Dec., 1902).
- TOPHAM, WILLIAM; The Hill, Spondon, Derby. (Feb., 1895; dormant 1902-5.)\*
- TOWNSEND, STANLEY M.; 3, Swift Street, Fulham, S.W. (Sept., 1898).
- TOYE, Mrs.; Stanhope, Bideford, N. Devon. (Feb., 1897).
- TRESTRAIL, Major ALFRED B., F.R.G.S.; Southdale, Clevedon. (Sept., 1903).
- 400 TREVOR-BATTYE AUBYN B. R., M.A., F.I.L.S., etc.; Broxton, Chilbolton, Stockbridge, Hants. (July, 1898).
- TURNER, THOMAS, J.P.; Cullompton, Devon. (Dec., 1895).
- TWEEDIE, Capt. W., 93rd Highlanders; Crosshill, West Hillside, Ayrshire. (April, 1903).
- VALENTINE, ERNEST; 7, Highfield, Workington. (May, 1899).
- VARDON, The Rev. S. A.; Langton Vicarage, Tunbridge Wells. (July, 1905).
- VERE, The Very Rev. Canon; St. Patrick's Presbytery, 21A, Solio Square, London, W. (Sept., 1903).
- VERNON, Mrs. E. WARREN; Toddington Manor, Dunstable, Bedfordshire. (Nov., 1907).
- VILLIERS, Mrs.; The Shielding, Ayr, N.B. (August, 1906).
- VIVIAN, Mrs.; c/o M. C. Tait, 23, Kidderpore Avenue, Hampstead, N.W. (March, 1903).
- WADDELL, Miss PEDDIE; 4, Great Stuart Street, Edinburgh, N.B. (Feb., 1903).
- 410 WALKER, Miss; Hanley Lodge, Corstorphine, Midlothian. (Jan., 1903).
- WALKER, Miss H. K. O.; Chesham, Bury, Lancs. (Feb., 1895).
- WALLOP, The Hon. FREDERIC; 48, Eaton Terrace, S.W. (Feb., 1902).
- WARDE, The Lady HARRIET; Knotley Hall, Tunbridge. (Aug., 1893).
- WATERHOUSE, Mrs. D.; 6, Esplanade, Scarborough. (Feb. 1903).
- WATSON, JOHN A. S.; Ellangowan, Caterham Valley, Surrey. (Dec., 1905).
- WATSON, S.; 37, Tithebarn Street, Preston. (Feb., 1906).\*



- WENTWORTH, Mrs.; Wooley Park, Wakefield. (March, 1907).
- WEST, COLIN; The Grange, South Norwood Park. (Jan., 1906).
- WEST, Miss E. E.; The Homestead, Hawthorne Road, Bickley Park, Kent. (April, 1898).\*
- 420 WHITAKER JOSEPH I. S., F.Z.S., M.B.O.U.; Malfitano, Palermo, Sicily. (August, 1903).
- WHITEHEAD, Mrs. HENRY; Haslem Hey, Bury, Lancs. (March, 1902).
- WIGLESWORTH, JOSEPH, M.D., M.B.O.U.; Rainhill, Lancashire. (Oct., 1903).
- WIGRAM, Miss FLORENCE E.; Chesnut Lodge, Cobham, Surrey. (July, 1903).
- WIGRAM, Miss MADELINE; King's Gatchell, Taunton. (Sept., 1903).
- WILDE, Miss M.; Little Gaddesden, Berkhamstead. (Dec., 1896).
- WILLFORD, HENRY; Upland View, Haven Street, Ryde, I. of W. (Nov., 1907).
- WILLIAMS, Mrs. C. H.; 49, Oakehampton Road, St. Thomas, Exeter. (May, 1902).
- WILLIAMS, C. J.; Government Offices, Bloemfontein, O. R. C. (Oct., 1906).
- WILLIAMS, Mrs. HOWARD; Oatlands, Sundridge Avenue, Bromley, Kent. (April, 1902).
- 430 WILLIAMS, SYDNEY, Jun.; Holland Lodge, 275, Fore Street, Edmonton, N. (Feb., 1905).
- WILLS, Mrs. H. H.; Barley Wood, Wrington, R.S.O., Somerset. (Nov., 1906).
- WILMOT, The Rev. RICHARD H.; Poulton Vicarage, Fairford. (Dec., 1902).
- WILSON, The Rev. C. W.; St. James Vicarage, Holloway. (June, 1904).
- WILSON, MAURICE A., M.D.; Kirkby Overblow, Pannal, S. O., York. (Oct., 1905).
- WILSON, T. NEEDHAM; Oak Lodge, Bitterne, near Southampton. (Dec., 1901).
- WILTON, The Countess of; The Hatch, near Windsor. (Oct., 1905).
- WINCHILSEA and NOTTINGHAM, The Countess of; Harlech, Merioneth. (April, 1903).
- WINDHORN, H.; Alfeld a Leine, Germany. (April, 1907).
- WOLFE, Miss GEORGINA; S. John's, 57, Granada Road, E. Southsea. (August, 1904).
- 440 WORKMAN, WM. HUGHES, M.B.O.U.; Lismore, Windsor, Belfast. (May, 1903).
- WORMALD, H.; The Heath, Dereham, Norfolk. (Dec., 1904).
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## RULES OF THE AVICULTURAL SOCIETY.

*As Amended August 1905.*

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1.—The name of the Society shall be THE AVICULTURAL SOCIETY, and its object shall be the study of Foreign and British Birds in freedom and in captivity. Poultry, Pigeons, and Canaries shall be outside the scope of the Society. The year of the Society, with that of each volume of the Society's Magazine, which shall be known as *The Avicultural Magazine*, shall commence with the month of November and end on the 31st of October following.

2.—The Avicultural Society shall consist of Ordinary and Honorary Members; and the latter shall be restricted in number to six, and be elected by the Council.

3.—The Officers of the Society shall be elected, annually if necessary, by Members of the Council in manner hereinafter provided, and shall consist of a President, one or more Vice-Presidents, a Business Secretary, a Correspondence Secretary, an Editor, a Treasurer, an Auditor, a Scrutineer, and a Council of fifteen Members. The Secretaries, Editor, and Treasurer, shall be *ex officio* Members of the Council.

4.—New Members shall be proposed in writing; and the name and address of every person thus proposed, with the name of the Member proposing him, shall be published in the next issue of the Magazine. Unless the candidate shall, within two weeks after the publication of his name in the Magazine, be objected to by at least two Members, he shall be deemed to be duly elected. If five Members shall lodge with the Business Secretary objections to any candidate he shall not be elected, but the signatures to the signed objections must be verified by the Scrutineer. If two or more Members (but less than five) shall object to any candidate, the Secretary shall announce in the next number of the Magazine that such objections have been lodged (but shall not disclose the names of the objectors), and shall request the Members to vote upon the question of the election of such candidate. Members shall record their votes in sealed letters addressed to the Scrutineer, and a candidate shall not be elected unless two-thirds of the votes recorded be in his favour; nor shall a candidate be elected if five or more votes be recorded against his election.

5.—Each Member shall pay an annual subscription of 10/-, to be due and payable in advance on the 1st of November in each year. New Members shall pay, in addition, an entrance fee of 10/6; and, on payment of their entrance fee and subscription, they shall be entitled to receive all the numbers of the Society's Magazine for the current year.

6.—Members intending to resign their membership at the end of the current year of the Society are expected to give notice to the Business Secretary before the first of October, so that their names may not be included in the "List of Members," which shall be published annually in the November number of the Magazine.

7.—The Magazine of the Society shall be issued on or about the first day of every month,\* and forwarded, post free, *to all the Members who shall have paid their subscription for the year; but no Magazine shall be sent or delivered to any Member until the annual subscription shall have reached the hands of the Business Secretary.* Members whose subscriptions shall not have been paid as above by the first day in September in any year shall cease to be members of the Society, and shall not be re-admitted until a fresh entrance fee, as well as the annual subscription, shall have been paid.

8.—The Secretaries, Editor, and Treasurer shall be elected for a term of five years, and, should a vacancy occur, it may be temporarily filled up by the Executive Committee (see Rule 10). At the expiration of the term of five years in every case, it shall be competent for the Council to nominate the same officer, or another Member, for a further term of five years, unless a second candidate be proposed by not less than twenty-five members of at least two years standing, as set forth below.

In the September number of the Magazine preceding the retirement from office of the Secretaries, Editor, or Treasurer, the Council shall publish the names of those gentlemen whom they have nominated to fill the vacancies thus created; and these gentlemen shall be deemed duly elected unless another candidate or candidates be proposed by not less than fifteen Members of at least two years standing. Such proposal, duly seconded and containing the written consent of the nominee to serve if elected, in the capacity for which he is proposed, must reach the Business Secretary on or before the 15th of September.

The Council shall also publish yearly in the September number of the Magazine the names of those gentlemen nominated by them for the posts of Auditor and Scrutineer respectively.

9.—The Members of the Council shall retire by rotation, two at the end of each year of the Society (unless a vacancy or vacancies shall occur otherwise) and two other Members of the Society shall be recommended by the Council to take the place of those retiring. The names of the two Members recommended shall be printed in the September number of *The Avicultural Magazine*. Should the Council's selection be objected to by fifteen or more members, these shall have power to put forward two other candidates whose names, together with the signatures of not less than fifteen Members proposing them, must reach the Hon. Business Secretary

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Owing to the extra pressure of work, the October and November numbers are liable to be late.

by the 15th of September. The names of the four candidates will then be printed on a voting paper and sent to each member with the October number of the Magazine, and the result of the voting published in the November issue. Should no alternative candidates be put forward, in the manner and by the date above specified, the two candidates recommended by the Council shall be deemed to have been duly elected. In the event of an equality of votes the President shall have a casting vote.

10.—Immediately after the election of the Council, that body shall proceed to elect three from its Members (*ex officio* Members not being eligible). These three, together with the Secretaries and Editor, shall form a Committee known as the Executive Committee. Members of the Council shall be asked every year (whether there has been an election of that body or not) if they wish to stand for the Executive, and in any year when the number of candidates exceeds three there shall be an election of the Executive.

The duties of the Executive Committee shall be as follows :

- (i). To sanction all payments to be made on behalf of the Society ;
- (ii). In the event of the resignation of any of the officers during the Society's year, to temporarily fill the vacancy until the end of the year. In the case of the office being one which is held for more than one year (*e. g.* Secretaries, Editor, or Treasurer) the appointment shall be confirmed by the Council at its next meeting ;
- (iii). To act for the Council in the decision of any other matters that may arise in connection with the business of the Society.

The decision of any matter by the Executive to be settled by a simple majority (five to form a quorum). In the event of a tie on any question, such question shall be forthwith submitted by letter to the Council for their decision.

The Executive shall not have power

- (i). To add to or alter the Rules ;
- (ii). To expel any Member ;
- (iii). To re-elect the Secretaries, Editor, or Treasurer for a second term of office.

It shall not be lawful for the Treasurer to pay any account unless such account be duly initialed by the Executive.

It shall be lawful for the Business Secretary or Editor to pledge the Society's credit for a sum not exceeding £15.

Should a Member wish any matter to be brought before the Council direct, such matter should be sent to the Business Secretary with a letter stating that it is to be brought before the Council at their next meeting ; otherwise communications will in the first place be brought before the Executive.

A decision of a majority of the Council, or a majority of the

Executive endorsed by the Council, shall be final and conclusive in all matters.

11.—The Editor shall have an absolute discretion as to what matter shall be published in the Magazine (subject to the control of the Executive Committee). The Business Secretary and Editor shall respectively refer all matters of doubt and difficulty to the Executive Committee.

12.—The Council (but not a Committee of the Council) shall have power to alter and add to the Rules, from time to time, in any manner they may think fit. Five to form a quorum at any meeting of the Council.

13.—The Council shall have power to expel any Member from the Society at any time without assigning any reason.

14.—Neither the Office of Scrutineer nor that of Auditor shall be held for two consecutive years by the same person.

15.—The Scrutineer shall not reveal to any person how any Member shall have voted.

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## THE SOCIETY'S MEDAL.

### RULES.

The Medal may be awarded, at the discretion of the Committee, to any Member who shall succeed in breeding, in the United Kingdom, any species of bird which shall not be known to have been previously bred in captivity in Great Britain or Ireland. Any Member wishing to obtain the Medal must send a detailed account for publication in the Magazine within about eight weeks from the date of the hatching of the young, and furnish such evidence of the facts as the Executive Committee may require. The Medal will be awarded only in cases where the young shall live to be old enough to feed themselves, and to be wholly independent of their parents.

The account of the breeding must be reasonably full so as to afford instruction to our Members, and should describe the plumage of the young and *be of value as a permanent record of the nesting and general habits of the species*. These points will have great weight when the question of awarding the Medal is under consideration.

The parents of the young must be the *bonâ fide* property of the breeder. Any evasion of this rule, in any form whatever, will not only disqualify the breeder from any claim to a Medal in that particular instance, but will seriously prejudice any other claims he or she may subsequently advance for the breeding of the same or any other species.

In every case the decision of the Committee shall be final.

The Medal will be forwarded to each Member as soon after it shall have been awarded as circumstances will permit.

The Medal is struck in bronze (but the Committee reserve the right to issue it in *silver* in very special cases), and measures  $2\frac{1}{2}$  inches in diameter. It bears on the obverse a representation of two birds with a nest containing eggs, and the words "The Avicultural Society—Founded 1894." On the reverse is the following inscription: "Awarded to (*name of donee*) for rearing young of (*name of species*), a species not previously bred in captivity in the United Kingdom."

### *Members to whom Medals have been awarded.*

For a list of the Members to whom Medals were awarded during the First Series see Vol. II. (*New Series*), p. 18.

#### NEW SERIES.

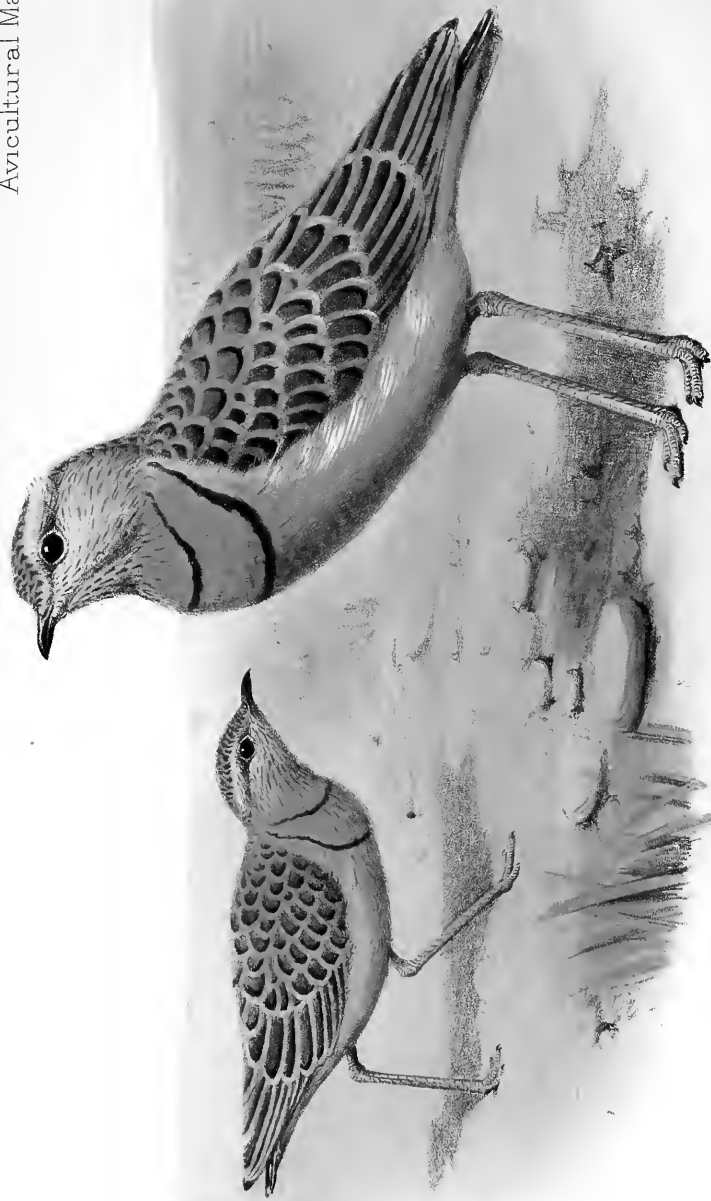
Vol. I., p. 317. Mr. D. SETH-SMITH, for breeding the Greater Button-Quail, *Turnix tanki*, in 1903.

- Vol. I., p. 336. Mr. L. M. SETH-SMITH, for Breeding the Rain-Quail, *Coturnix coromandelica*, in 1903.
- „ „ p. 393. Miss R. ALDERSON, for breeding the White-fronted Dove, *Leptoptila jamaicensis*, in 1903.
- „ „ p. 400. Mr. W. H. ST. QUINTIN, for breeding the Ruff, *Pavoucella pugnax*, in 1903.
- Vol. II., pp. 211 & 263. Mr. D. SETH-SMITH, for breeding the Brush Bronzewing Pigeon, *Phaps elegans*, in 1904.
- „ „ p. 270. Miss R. ALDERSON, for breeding the Rufous Dove, *Leptoptila reichenbachii*, in 1904.
- „ „ p. 278. Mr. D. SETH-SMITH, for breeding the Scaly Dove, *Scardafella squamosa*, in 1904.
- „ „ p. 285. Mr. D. SETH-SMITH, for breeding the Tataupa Tinamou, *Crypturus tataupa*, in 1904.
- „ „ p. 339. Dr. ALBERT GÜNTHER, for breeding the Red-backed Shrike, *Lanius collurio*, in 1904.
- „ „ p. 353. Mr B. FASEY, for breeding the Yellow-rumped Parrakeet, *Platycercus flaveolus*, in 1904.
- „ „ p. 353. Mr. C. CASTLE-SLOANE, for breeding the Talpacoti Dove, *Chamæpelis talpacoti*, in 1904.
- Vol. III., p. 64. Mr. W. H. ST. QUINTIN, for breeding *Pterocles exustus* in 1904.
- „ „ p. 75. Mrs. HOWARD WILLIAMS, for breeding the Yellow Sparrow, *Passer luteus*, in 1904.
- „ „ p. 130. Miss R. ALDERSON, for breeding the Solitary Ground-Dove, *Leptoptila chlorauchenia*, in 1904.
- „ „ p. 295. Mr. D. SETH-SMITH, for breeding *Turnix varia*, in 1905.
- „ „ p. 352. Sir WILLIAM INGRAM, Bart., for breeding Gray's Bare-throated Francolin, *Pternistes leucoscepus*, in 1905.
- „ „ p. 363. Mr. D. SETH-SMITH, for breeding the Swamp-Quail, *Synæcus australis*, in 1905.
- Vol. IV., p. 24. Mrs. MICHELL, for breeding Forsten's Lorikeet, *Trichoglossus forsteni*, in 1905.
- „ „ p. 30. Mrs. HOWARD WILLIAMS, for breeding the Pileated Finch, *Coryphospingus pileatus*, in 1905.
- „ „ p. 68. Mrs. HOWARD WILLIAMS, for breeding the Pectoral Finch, *Munia pectoralis*, in 1905.
- „ „ p. 70. Mr. W. E. TESCHEMAKER, for breeding the Green Avadavat, *Stictospiza formosa*, in 1905.
- „ „ p. 117. Mr. A. TREVOR-BATTYE, for breeding the Scaly-breasted Colia, *Callipepla squamata*, in 1905.

- Vol. IV., p. 276. Mr. R. FASEY, for breeding Bourke's Parrakeet, *Neophe-  
ma bourkei*, in 1906.
- " " p. 307. Dr. A. G. BUTLER, for breeding the Tambourine Dove,  
*Tympanistria tympanistria*, in 1906.
- " " p. 331. Mr. W. E. TESCHEMAKER, for breeding the Black  
Tanager, *Tachyphonus melaleucus*, in 1906.
- " " p. 536. Mr. H. BOUGHTON-LEIGH, for breeding the Great-billed  
Andaman Parrakeet, *Palæornis magnirostris*, in 1906.
- " " p. 354. Mr. W. E. TESCHEMAKER, for breeding the Red-headed  
Finch, *Amadina erythrocephala*, in 1906.
- Vol. V., p. 44. Mrs. JOHNSTONE, for breeding Johnstone's Lorikeet,  
*Trichoglossus johnstoniæ*, in 1906.
- " " p. 55. Mr. W. H. ST. QUINTIN, for breeding the Pine Grosbeak,  
*Pyrrhula enucleator*, in 1906.
- " " p. 57. Mr. J. H. GURNEY, for breeding the Jackal Buzzard,  
*Buteo jackal*, in 1906.
- " " p. 59. Mr. E. J. BROOK, for breeding the White-eared Conure,  
*Pyrrhura leucotis*, in 1906.
- " " p. 87. Mrs. JOHNSTONE, (Silver Medal), for breeding Fraser's  
Touracou, *Turacus macrorhynchus*, in 1906.
- " " p. 113. Mr. W. E. TESCHEMAKER, for breeding the Yellow-rumped  
Finch, *Mania flaviprymna*, in 1906.
- " " p. 198. Mr. W. E. TESCHEMAKER, for breeding the Yellow-  
rumped Serin, *Serinus angolensis*, in 1907.
- " " p. 342. Mr. W. R. FASEY, for breeding the Adelaide Parrakeet,  
*Platycercus adelaidensis*, in 1907.
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H. Goodchild, del. et lith.

TWO-BANDED COURSER.  
*Rhinoptilus bicinctus*.

Bale & Danielsson, Ltd. imp.

Drawn from life

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## THE DOUBLE-BANDED COURSER.

(*Rhinophilus bicinctus*).

By Captain BOYD HORSBRUGH, A.S.C., F.Z.S.

In April, 1905, I was shooting Quail along the banks of the Modder River in the O.R.C., I was walking in some longish grass when I saw two Rufous Coursers (*Cursorius rufus*) get up and I was going to shoot when I noticed that they were accompanied by a young one, so lowered my gun.

They settled within a hundred yards, and on going up to the place I saw the young bird squatting like a baby lapwing. I picked him up and took him home to my aviary, and for the first few days fed him on white ants and mealworms. I had to watch him closely while he ate the latter as the various Bulbuls, etc., were much too near them to give a stupid baby much of a chance. When I caught him he was simply covered with bird lice, but a dusting of Keating's insect powder soon got rid of them.

Some weeks later I got a young Rufous Courser, which is the same sized bird as the Double Ringed. I put him into the aviary thinking he would be a cheerful companion for my first friend, but he met a speedy death instead. The bird even at that early stage being of a very quarrelsome disposition with other ground birds.

In June I managed to get him on to Century Food, but it was not until July 2nd that he started developing the distinctive double rings round his neck, which caused me to realise that I

had made a complete mistake about this species. The two old birds that were with him the day I found him were most certainly *C. rufus* and so I can only conclude that his own parents were hiding somewhere near.

The young bird quickly got his double rings and was in complete adult plumage by the end of July, which is our cold weather. He had no shelter from cold and thrived well in spite of it, and as a matter of fact he was neither sick nor sorry during the entire time I kept him in South Africa, although exposed more or less to all weathers; in heavy rains we did try to shelter him, but it was no easy matter as he was such a restless being, and also he looked upon the shelters with some suspicion and preferred to paddle about outside in the wet.

His juvenile plumage was exactly like the adult plumage but lacked the black necklaces. Sclater says of it:—“This interesting little species is found all over the Karro districts of the Cape Colony, the O.R.C., S.W. part of the Transvaal, Bechuanaland, and German territory, but is not found in the eastern part of Cape Colony, Natal, or Rhodesia as far as our present knowledge goes.

It is found in open country in pairs or small parties, it runs swiftly and is most difficult to flush. In most places it is more abundant in the rainy season than in winter and is probably a partial migrant. It feeds in the wild state chiefly on ants (white) and, as I am informed by Major Sparrow, lays one egg only on the bare ground in a slight depression.

With all respect to my friend Major Sparrow, my brother and I have both found clutches of two eggs on various occasions. The eggs are very handsome, being pale in colour thickly covered with fine lines, both straight and curved, of a yellowish brown; the shape is a rounded oval, with but slight indication of the pointed end, and the measurements average  $1.2 \times 1.0$ . I found this bird to be semi-nocturnal in both the wild and the tame state, the large and liquid eyes also point to this.

When adult, my bird began his evening song just after sunset and our bridge evenings were enlivened by his mournful whistle, which was surprisingly clear and loud for his size, and

often I have heard this same whistle late at night when camping out.

I kept *R. bicinctus* for fifteen months in my aviary at Bloemfontein and took him home with me last July to the Zoological Gardens in Regent's Park, where he was still alive when I last heard of him. I took him home in a box with a carefully padded top and had the good fortune to have enough mealworms to feed him on, and on these and chopped cooked meat he did quite well. He was always delightfully tame and set up an impatient whistle when his dinner was not up to time. This species does not bathe often, I only saw him do so twice, but he likes a dust bath. He was a bit of a fad about his food and got greatly excited when Barbets, Bulbuls, Glossy Starlings, etc., came down for a share of his saucer, instead of staying by his dinner steadily eating he would chase all round the aviary after one bird and leave six eating hard, then return, have one peck, and then off again after somebody else so that he really worked quite hard for his living. On the ground he was more or less master and inclined to be a bully, so that I was rather amused one day to see him lying stretched out in the sun while a Violet-eared Waxbill preened his feathers for him. Birds of the size of Zosterops and Waxbills he did not mind, probably considering them beneath his notice, but he had an especial dislike of the Starlings.

This bird is quite common near Potchefstroom, Transvaal, where I am now stationed, and generally speaking all over this part of the Transvaal. It should be comparatively easy to collect one or two of this species, which I very much wish to do, but unfortunately I have not yet had the luck to find them. I hope I may be more fortunate in the spring for I very much wish to keep again the little Ringed Courser or "Dravelkie" as the Boers call it.

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## CRANES AT WOBURN PARK.

By the DUCHESS OF BEDFORD.

Having read Mr. Astley's article on "The Cranes" in the last number of the *Avicultural Magazine*, I think the following notes may be of interest to some of your readers.

The following Cranes have bred at Woburn :—

The Common Crane (*Grus communis*).

The Sarus Crane (*Grus collaris*).

The Demoiselle Crane (*Anthropoides virgo*).

The White-necked Crane (*Anthropoides leucachen*).

The following have nested but have never hatched out :—

The Australian Crane (*Grus australasiana*).

The Stanley Crane (*Anthropoides paradisea*).

The Manchurian Crane (*Grus japonensis*) has made a nest and sat upon a Rhea's egg which it found in the Park, but they have never laid at Woburn.

The following Cranes have been in the collection, but have never nested :—

The American Crane (*Grus americana*).

The Canadian Crane (*Grus Canadensis*).

The Wattled Crane (*Anthropoides carunculata*) a single bird.

The Asiatic White Crane (*Anthropoides leucogeranus*).

The Demoiselle and Common Cranes have raised their young to maturity.

The White-necked, which have hatched on four occasions, have been unlucky, the young, when well grown, having been drowned in the ponds or killed by other animals.

The young Sarus Crane was also drowned when half grown.

## NESTING OF THE CHINGOLO SONG SPARROW,

(*Zonotrichia pileata*).

By W. E. TESCHEMAKER.

I recently received an intimation from our Editor that some copy would be acceptable but, though the spirit is willing, I regret that I have so little of interest to record. The fact is owing to severe illness I have practically no results to record

this season. From the commencement of May until the end of July my aviaries had to look after themselves and, when I was again able to resume the management of them, I found that losses had been so heavy that I had very little material to work with. This is the more annoying because at the time I was taken ill I had some rather interesting nests, namely one of the Violet-eared Waxbill (two young), Lesser Ruddy Waxbill (two young), Blue-breasted Waxbill (eggs), Rufous-backed Mannikin (one young), Grey-necked Serin (three young), and Quail Finch (eggs). None of these young birds came to maturity. I have also had eggs from the Blue Grosbeak, two nests and one egg from the Violet Tanager, one young Sulphury Seedeater, and a nest (presumably containing eggs) on which a hen Paradise Whydah sat steadily for some time. One may talk about the weather, bad luck, etc., but the fact remains that from all the above nothing has been satisfactorily reared except one young *Serinus angolensis*, two young Chingolos, and a large number of Bengalee-Striateds, etc.

Certainly there are times and seasons when the possession of an aviary is anything but a source of pleasure. Indeed, were it not that the aviculturist is born and not made, I doubt if any sensible person would ever enter upon so difficult, laborious, and expensive a hobby. However, in the long run he has his rewards if he be a genuine ornithologist, and perhaps one of the chief of these is to be able now and again to see the nesting operations of a really rare bird.

Needless to say the subject of the present notes does not come under this category, for the Chingolo is quite a common South American species and, as far as my experience goes, quite an easy one to breed. It would not in the least surprise me to hear that it has already been bred and possibly several times over. Our Editor writes me that he has succeeded in crossing this with an allied species.

I think it has before been remarked in our Magazine that the term Song Sparrow is more or less of a misnomer, as applied to this species, for its song is certainly not remarkable and it is more nearly allied to the Buntings than to the Sparrows.

I had a couple of Chingolos in a well-shrubbed aviary in

1905, but they made no attempt to nest. In March, 1906, the same birds commenced to carry building materials into a small cupressus and, to give them a better chance, I enclosed them and the cupressus and a pair of Accentors (which also seemed inclined to nest) with some herring netting. It is curious that the Accentors, though generally such shy birds, nested successfully under these conditions, but the Chingolos at once suspended operations. I then removed them to the Waxbill's aviary where, to my great astonishment, I one day found two nests, within a few inches of one another, one containing three and the other two eggs, and one Chingolo sitting in each! In a word they were two hens.

The sexual characteristics of this species do not seem at all well marked. I selected these two birds with some care. One was a larger bolder bird and had a much more pronounced crest—but it was a hen for all that.

This season I was not satisfied until I had obtained a bird that actually sang, and then, having caught up one of my last year's birds, I was reasonably sure that I had a pair. I really, however, can see very little difference between them, so far as their outward and visible form is concerned, save that the chestnut patch on the neck of the male is certainly brighter.

As this species has with me proved itself far from amiable in general company, I turned them out by themselves in a breeding pen this spring.

In their new quarters the male soon commenced to sing. I think the song of this species must vary a good deal in individuals. The Zoological Society turned out a good many Chingolos in a pen near the Monkey House this summer, and I noticed that several of them were singing quite a bright little refrain consisting of a few preliminary staccato notes and ending with a kind of trill, but my bird can only produce a monotonous phrase consisting of generally only four notes, sibilant and long drawn out, reminding one of the silvery cadence of the Willow Warbler.

I regret that this season, for the reasons given above, I have not been able to enter dates in my note book, but towards the middle of July I first noticed the hen sitting. Owing to the



awkward position of the nest I could not see exactly how many eggs she was incubating. When she had sat three weeks I concluded the eggs were unfertile and turned a second hen into the enclosure. Apparently on the principle that "two is company : three is none" the original pair fell upon the new comer and the following day I had the mortification of removing its mangled remains.

Matters now resumed their former course—the hen sitting steadily, the cock singing industriously.

After incubation had proceeded in this way for a month I examined the nest carefully and, to my very great astonishment, found that it contained four eggs and two young birds only a few days of age. I can only explain this by assuming that the hen laid three eggs, sat a fortnight, then laid three more eggs and sat another fortnight—an event which has never occurred before in my aviaries.

The eggs I examined in 1906 had a white ground colour, but this season's eggs were of a light bluish green with spots and blotches of light brown and olive, the spots in some cases forming a ring round the larger end of the egg, as with our Red-backed Shrike. The eggs are large for the size of the bird.

The young birds had some whitish down on their heads and backs. They grew and feathered very rapidly, the hen doing nearly all the feeding, and taking nothing to the young but live insect food.

On leaving the nest the young had the two broad bands on the head dark brown instead of black ; the cheek markings and the black stripes behind and below the eye similar to the adults, but no chestnut patches on the neck ; the scapulars not so boldly striped and instead of the uniform grey tone of the breast of the adults, a light brown ground colour closely spotted with dark brown, like a Skylark. The head markings soon became darker, and the spots began to disappear from the lower part of the breast. The young very quickly became independent and are now flourishing.

I should think this is a very likely species to have been bred as it seems hardy and easily acclimatised, but I have not yet been able to hear of a definite instance. Mr. Pocock

writes me that the Zoological Society has not yet succeeded in producing any young Chingolos.

P.S.—I see in Dr. Butler's most excellent Handbook on "Foreign Bird Keeping" the statement that "the nest is built in a depression on the earth: very rarely in a bush or on a stump." The four nests built in my aviaries (and the hen is now building a fifth) have all been placed in shrubs about four feet from the ground.

P.S.—Oct. 22. After the fifth nest had been removed this hen constructed a sixth at the very highest point in the enclosure, 7ft. 6in. from the ground, and again laid three eggs.

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## ON BREEDING BATHILDA RUFICAUDA.

By JOAN GLADSTONE.

I was away from home when the nest was started, and also after September 4th, so cannot say very much about the progress of the building. The cock had been carrying hay about for some time. A small portion of an ant-hill was put in the aviary every day, but latterly there have not been many ants' cocoons in the heap, so that the birds must have either eaten the ants or the other insects found in the earth.

The parent birds have been in my possession two years and have wintered out-of-doors.

August 13th. Rufous-tails in out-door aviary reported as sitting on three eggs; certainly four or five laid, as ascertained later.

August 19th. One chick hatched.

August 27th (or about that date) two chicks; two eggs dropped through the very loosely woven hay of the nest, which was shaped rather like an egg standing on its small end, with the opening high up on one side facing S.W. It was made of coarse hay, lined with moulted Canary feathers and firmly fixed to a big Mediterranean heath bush about 4ft. 6in. from the ground. Chicks had dark grey down, with black and white speckles on the wing-feathers.

August 31st. Chicks partly feathered, still dark grey with





Photo by Rev. H. W. Laillay.

**THE TRUMPETER BIRD.**

*Psophia crepitans.*

speckly wings. On a closer inspection there is a brown tinge on all except the tips of the wing-feathers.

September 4th. One chick dead, one left nest.

September 18th. One chick, as large, if not larger than its parents, with yellow brown plumage and black beak, was being constantly fed by the cock. It was less yellow in colour than the parents and was greyish underneath. Its voice was extraordinarily strong and its call for food something between a young Canary's squeak and the adult Rufous-tail call-note.

September 28th. Still being fed by parents.

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## THE TRUMPETER BIRD

*(Psophia crepitans).*

By MRS. GREGORY.

I have long wanted to possess a Trumpeter Bird and was fortunate in securing the only one Mr. Harper brought from tropical America last July. Having had it barely three months I have much to learn and feel anxious as to how it will stand a winter out-of-doors even in a very sheltered garden. I have been told that these birds do not live long in England, which, I suppose, is the reason why they are difficult to obtain. I cannot imagine they would do well in an aviary however large, as they require a great deal of exercise and liberty and much attention and petting bestowed upon them. My bird is always anxiously looking out, and runs to meet me every time I enter the garden, and I find it difficult to leave him for many hours. I have read of the extraordinary courage of the Trumpeter and have now had proof of it. He made himself master of my five Cranes as soon as he arrived, not by bullying and worrying them, but simply shewing them he would be first. When any grain is thrown, he rushes with his beak wide open at each Crane in turn and they fly up over his head to escape, and yet he does not care for corn but will eat it rather than see them do so. In their own country the "Agami" (as the natives call the Trumpeter Bird) is trained to drive sheep and poultry. Perhaps mine has had this training, for Mr. Harper tells me it is hand-reared and he procured him

from the Aborigines. At any rate he assists energetically in driving up the Crowned Crane, jumping up at his head from one side to the other and even springing on to the Crane's back and pecking violently at the crest feathers if the Crane tries to dodge back, but he, I am glad to say, has lately had the sense to go to bed earlier and goes to the far end of the house which the two birds share. Like the Cranes, the Trumpeter roosts standing on one leg, but not on the ground. He climbs into a pear tree, and is anxious to remain out, but, acting on advice, I harden my heart and take him down by force in spite of kicks and struggles. As a compromise, I have had the branch he prefers cut from the tree and put into his house. Referring again to the Trumpeter's pluck I have seen it make a rush at a cat and even at a small dog, but fortunately their owners came to the rescue. Also he had a fight with my Swinhoe Pheasant and came off with a bleeding head. The photograph gives an excellent idea of his appearance. He is not larger than a fowl, but his legs and neck being so much longer make him appear tall. The whole plumage is black except a sprinkling of feathers on the neck and breast which are tipped with green changing into violet, according to the light. The little soft round head looks as if covered with black plush or velvet. Across the middle of the back and wing coverts is a brownish patch, which passes into ash colour lower down. The legs are very faintly tinged with green. The voice of the Trumpeter is most peculiar, a sort of low hollow sound made with the beak shut, when the bird is excited.

I give it grasshoppers, centipedes, caterpillars, and all the insects I can get, as it prefers them to any food. Also worms, of which it will eat any quantity. It also has boiled rice and hard-boiled eggs. Occasionally a little potatoe and banana.

It is a very clean bird, and follows me into the house and from one room to another, often perching on chairs and tables, where it stands preening itself. One of its pretty ways is to stand and hold out its head and neck to be stroked. It will remain in this position for some minutes, but moves away directly its body is touched.

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## NOTES ON AVICULTURE IN GEORGETOWN, DEMERARA.

By E. WILLIAM HARPER, F.Z.S.

Perhaps it may not be out of place to remind our readers that Georgetown, the chief town of Demerara—"where the sugar comes from"—and capital of British Guiana, is situate on the coast at the mouth of the river Demerara in lat. about 7° N. It must not, however, be conjectured that, from its close proximity to the equator, Georgetown is a very hot place; for, thanks to the trade-winds which blow for about ten months in the year, the average temperature is only 84°. During August and September, in the absence of the "trades," it gets a little hotter; whilst during December and January it may be said to be really cold at nights, when a blanket may be styled a blessing. Demerara is low-lying and therefore damp, with a necessarily humid atmosphere.

Before coming to the birds, I may state that the blacks of the colony are *not* aviculturists—a direct contrast to what one finds in the east, where real enthusiasm and skill amongst the natives exist. The visitor to Georgetown is sure sooner or later to make the acquaintance of a well-known local character, namely, a Portuguese bird-seller, who meets all mail steamers. If he cannot manage to get an interview on the landing-stage, he will make it his business to find out where you are staying—not a difficult matter where "whites" are in the minority—and give you a call; when you will have an opportunity of inspecting his live-stock, which generally consists, besides birds, of monkeys and curios obtained from the aborigines in the interior. The small birds are confined in cages or "quakes"—baskets made of cane-work with a mesh varying from half an inch to one inch—which are suspended in a row from a bamboo carried horizontally in one hand; in the other hand is generally another bamboo with a row of Parrots and Macaws sitting upon it, each tied by one leg. Some of the monkeys sit upon the bamboo above the "quakes" and cages; whilst others enjoy more exalted positions upon the shoulders or head of the vendor.

To begin with the Parrots: in the general market—where,

in addition to provisions, fruit, meat, fish, ice, poultry, etc., birds are always on sale—Parrots “in bulk” (to use a commercial expression) are kept by dealers in packing-cases, provided with perches and covered with wire netting. Their chief food whilst awaiting purchasers consists of sugar-cane and maize; water, I regret to state, is in some cases very seldom given. Considering that a sugar-cane about ten feet long and an inch and a half thick can be bought for 1d., this diet is decidedly economical; it is also much relished by the Parrots, which obtain from it food, moisture and occupation. That *bête-noire* of Parrot-keepers—feather-plucking—is seldom seen. The commonest Parrot, and I might almost say the commonest *cage-bird*, in Georgetown is the Orange-winged Amazon (*Chrysotis amazonica*), known locally as the “screecher”—a name which it well deserves. In private houses these birds are often chained by one leg to a horizontal perch, nailed at right-angles to a board which hangs against the wall. They are also confined in circular-topped wire cages about fifteen inches in diameter, fitted beneath with an outside tin tray, through the turned-up edges of which a metal pin runs. These excellent cages can be purchased for about 4/- each, and last for years. Cheaper Parrot-cages have a solid tin top and bottom, with hollow tin bars and sliding door. As these have no removable bottom, the bird is able to enjoy a bath, from the splashing which takes place during the weekly or bi-weekly cleansing of the cage under the water tap. The local price of the “screecher” is about 4/-. Many of them are hand-reared by the aboriginal Indians, who bring them down the river to town and sell them to local dealers. I once saw an East Indian—an ex-cooly immigrant—with about two dozen adult freshly-caught “screechers” in a box exposed for sale on the foot-path at 2/6 each. They were savage as wolves, “going for” the hand of the intruder with beak and claw. In answer to my inquiry as to how he had caught them, the vendor said it was done by slipping a noose, attached to the end of a stick, over the head of the bird at night as it sat in a tree; the catcher stealthily climbing the tree for the purpose. Whether he was telling the truth or not—perhaps looking on me as a rival catcher—I cannot say; but that is the method adopted in catching tree-lizards. In



addition to sugar cane and maize, private owners also give their Parrots red and green capsicum, plantain, and bread soaked in coffee. Plantains are a kind of bananas, but harder and less sweet than the latter. There is a foolish superstition amongst the natives that bananas prevent linguistic ability in Parrots; and that they will kill the bird if persistently given.

Other Amazons commonly kept are the Yellow-fronted (*Chrysotis ochrocephala*) called the "Amazon," and the Mealy (*C. farinosa*) or "Saurama."

The Red-vented Parrot (*Pionus menstruus*), and less frequently the Dusky (*P. fuscus*) and the Black-headed Caique (*Caica melanocephala*)—always hand-reared by the aborigines—are sometimes on view. A red-vented which I possessed used to spend more time outside its cage than in it; and became rather a nuisance by caressing my face when I was asleep. The Hawk-headed Caique (*Deroplyus accipitrinus*) is rare. One belonging to a negress used to have its liberty in a tree over her house; and although I offered her a good price, she refused to sell. When I called sometime afterwards to increase my offer, I found the bird had died; and upon my saying "It serves you right," she acquiesced with a broad grin, disclosing a lovely set of teeth.

There are generally a few Macaws on view, the commonest being the Blue and Yellow (*Ara ararauna*), I had one which was so tame it would follow me about outside. A fine pair of the Red and Blue (*A. macao*) are at liberty in the splendid Botanical Gardens; spending the day in the trees, and retiring at night to the shelter of an aviary. The Red and Yellow (*A. chloroptera*), Hahn's (*A. hahni*), and another small green species called the "Eta" Macaw (named *A. macavuauna* in the local museum, but which I have been unable to verify elsewhere) are also occasionally to be seen. Two young ones of the last-named species were fed for weeks and reared by my tame Red-vented Parrot, already mentioned; and very comical it was to see them running about the floor after their smaller foster-parent, which regurgitated the food for their benefit in proper parrot fashion.

Of Conures, the Yellow (*Conurus solstitialis*), called locally the "kissi-kissi," and the Blue-winged (*Pyrrhura picta*) or

“scaly-breasted” are amongst those species sometimes kept. The commonest is the Brown-throated (*C. æruginosus*), which is sometimes hawked about the streets in a freshly-caught condition, and can be observed flying in small flocks just outside the town. The Golden-winged Parrakeet (*Brotogerys tuipara*), so destructive to the woodwork of cages, is not uncommon. The Guiana Love Birds (*Psittacula guianensis*) appear to be all imported from the neighbouring colony of Dutch Guiana: they breed freely in captivity in quite small cages, the cock being very fussy when he becomes a father. Although owing to the “safety in numbers” several dozen may be put together, yet two pairs in one cage cannot agree, as I proved to my cost—one cock promptly killing the other. A few African Greys are occasionally imported, either direct from West Africa by sailing-ship, or via Madeira.

The Toucans, called locally “bill birds”—those beaky birds reminding one so much of the Hornbills of the Old World—should perhaps be mentioned next. Dealers tell me that they do not find a ready sale; but young hand-reared birds are occasionally seen. It is astonishing how tame these birds become: I have seen one, which was allowed its liberty in a small garden, hopping into a crowded street in which trams were continuously passing. One which I possessed was allowed to come out of its cage daily to bathe in a wash-hand basin; at night it roosted upon a towel-horse, turning its tail over its back in true Toucan fashion. The two species most often met with are the Sulphur-and-white-breasted (*Ramphastos vitellinus*) and the Toco (*R. toco*).

Next to the Parrots in point of favour as cage birds come the Finches. They are generally kept in well-made wire cages, each provided with a sliding drawer at one end for seed, and a wooden false-bottom. Sand is never given. On one occasion I was explaining to a man how important it was that Finches should be supplied with sand, when he replied quite seriously, “I think they prefer seed!” It may surprise our members to hear that owing to a specific duty on bird-seed, canary-seed is retailed in Georgetown at 5d. and 6d. per lb. Cages containing small birds can safely be hung out of doors in Demerara, owing to the

absence of Crows and Kites, which make such a proceeding impossible in the Eastern tropics. Though somewhat of a digression, it may be mentioned that there are no Sparrows in the Colony. After not having seen them for over three years, they now appear larger to me than formerly—certainly their impudence has not decreased. Bird-lime—the milky exudation from a tree—and trap cages are the means of capture principally adopted. This local bird-lime has the disadvantage that, unless it is removed at once with oil, the birds' feet are liable to suffer on account of its irritating properties.

The seed-eater most commonly kept is the Field Saffron Finch (*Sycalis arvensis*), with its rasping song, like the running down of a watch-spring. This bird is known locally as the "colony canary" and "bastard canary." The mortality amongst freshly-caught seed-eaters is considerable, owing to their being fed immediately after capture upon hard seed, instead of first softening it by soaking in water. Another fatal practice is that of overcrowding the cages so that the drinking water becomes fouled.

Undoubtedly the best songster in the colony is the Thick-billed Seed Finch (*Orizoborus crassirostris*) or "twa-twa"; and a good performer fetches a high price. Although this species prefers paddy-rice to canary seed it is thoughtlessly fed upon the latter: in spite of the fact that the former, being grown upon the spot, is only about a fourth the price. Old male "twa-twas" are black with light-coloured beaks; old females are brown, also with light beaks. The young of both sexes are brown with black beaks. The colour-change in the males takes place apparently at the age of about a year, or perhaps a few months less; the black appearing gradually in a patchy manner. Almost like an undersized "twa-twa" in build, but with a chestnut-breast and abdomen, is the "towa-towa" or Tropical Seed Finch (*O. torridus*). Like the young "twa-twa" the immature "towa-towa" is brown, and the song of the latter, though not equalling that of its larger relation, is still very sweet.

The genus *Spermophila* contains some interesting and favourite species: the White-throated Finch or "ring-neck" (*S. albicularis*); the Lavender-backed Finch or "blue-back" (*S.*

*castaneiventris*); the Fire-red Finch (*S. minuta*); the Lined Finch (*S. lineola*); and the Black-headed Lined Finch (*S. ocellata*). The two last named are called "moustache birds"; whilst the whole of the genus are spoken of as "grass-birds." The immature males of all the five species just mentioned are brown, varying somewhat in intensity; the three first-mentioned species sing. By the bye, natives of Demerara speak of singing as "rattling."

Although our Magazine does not cater for Canaries, these notes would not be complete without including these ubiquitous birds; their chief admirers appear to be the Portuguese—of whom there is quite a large population in the colony—who import the birds in cane cages from Madeira. Along with the Canaries come a few Goldfinches from the same island.

(*To be continued*).

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## BREEDING OF THE ROULROUL OR RED-CRESTED WOOD-PARTRIDGE.

*Rollulus roulroul*.

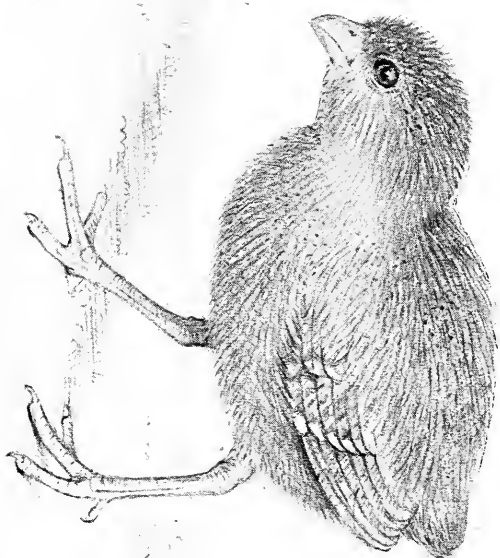
By Sir WILLIAM INGRAM, Bart.

I believe it may safely be said that until my two Roulroul Partridges hatched their chicks no young of this rare species had ever been seen by a civilized human being. I have been informed that eggs have been produced in this country (at the Zoological Gardens), but in this case the female would not incubate them.

My two birds were bought from a dealer in Marseilles in 1905, and in 1906 laid four eggs which were successfully hatched, but all four chicks were a few days afterwards destroyed by rats.

This year, the parents again succeeded in hatching three young birds, two of which, unfortunately, died a few days after leaving the eggs, but one survived for over three weeks. I attribute the death of this last bird to unsuitability of food, no ants' eggs being procurable, or perhaps the excessive heat may have been the cause of their decease.

The parents have lived since I bought them in one of my aviaries at Monte Carlo. They are not very shy birds except



Collingwood Ingram del.

YOUNG OF *ROLLULUS ROLLULUS*.

About three weeks old.



perhaps during the breeding season. The female constructs a curious domed nest, which is very cunningly concealed among the grasses and brushwood of the aviary. The dome is considerably flattened with a small and proportionately low aperture. It is constructed of dry grasses and as in the last nest, of fronds of dead palm leaves.

Once the female has completed her nest the male keeps as far as possible from his partner's abode, and leaves all the sitting to his mate. She seldom leaves the nest and then only for a very short time, always closing up the entrance during her absence.

It is after eighteen days' incubation that the chicks emerge from their eggs, and when first born are sweet little fluffy beings of a dark chocolate colour. Although the head of one that died a day after its birth shewed indications of a reddish tinge when under close inspection, the chick, of which an illustration is given, is the one that survived over three weeks, and I infer it may have been a female as I could find no indication of reddish colour on its head; this, I should say, is confined to the male chicks.

Both parents fed the young, food being taken from their beaks when they had picked up any dainty bit, the while calling their little ones with a low-tuned chirp.

In the week before the death of the last chick, the female Roulroul built three more nests, all domed like the one in which the bird deposited her eggs. Could these have been constructed as hiding places for her baby? They certainly were not used for a second clutch of eggs, as the female had not begun to lay again.

I hope next year I may be more successful. A good supply of fresh ants' eggs shall be ready, one or two eggs shall be reserved for an incubator, and an attempt to hand-rear them made in the same way that Mr. Seth-Smith did so successfully with his Hemipodes.

In the three-week-old chick the quill feathers were so well advanced that I have little doubt, even at this early age, it could fly well as is the case with the precocious young of many other Gallinaceous birds. The rectrices were also developed. The

nestling down was a uniform dark chocolate brown, but the wing feathers were faintly barred, and the secondaries and coverts being tipped with white, indicating a mottled appearance in the first plumage. Legs and bill were bright red.

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## NOTICES OF NEW BOOKS, ETC.

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### THE SEXING OF LIVING BIRDS.

The difficulty of determining the sex of those birds in which the plumage is superficially alike in both male and female is one that troubles the majority of aviculturists perhaps as frequently as any other matter that may arise in connection with their hobby. What can be more annoying, after having paid a high price for a couple of very rare birds which it is hoped, in course of time to breed, than to discover that both belong to the same sex? With many birds, of course, the sexes, when adult, are perfectly distinct, but in such cases the young males often resemble the female, and the tyro may find that after a time his "hen" commences to show bright feathers, and eventually "turns into a cock." In other species, such as the Weavers, the males assume their characteristic plumage only for a certain period of each year, at other times being more or less similar to the females.

Thus the aviculturist, unless he is quite experienced, is beset with difficulties and may very easily make mistakes in selecting his birds if he relies upon his own judgment, or the word of the dealer from whom he purchases.

Dr. Butler, who is always ready to help in avicultural matters, has spared no pains in the preparation of one of the most useful helps to the aviculturist that has appeared for a long time. "How to Sex Cage Birds" ("The Feathered World" office, 9, Arundel Street, W.C., price 3/6), deals with every species that the ordinary mortal is likely to come across and many more as well, and where there is a means of distinguishing the sexes the author has pointed it out.

In preparing the work Dr. Butler has not relied entirely



upon his own extensive knowledge of living birds, he has consulted all the reliable books that could in any way help him, and has gone through the splendid series of specimens in the British Museum. We have the greatest pleasure and confidence in recommending this little book to our members, and can assure them that they really ought to have it.

---

## CAGE BIRD TRAFFIC IN THE UNITED STATES.

We have received a pamphlet, published by the United States Department of Agriculture and written by Mr. Henry Oldys, relating to the traffic in Cage Birds in the United States, which is instructive and interesting reading. Aviculture is quite in its infancy amongst the Americans, and there is very little interest taken in the breeding of foreign species if we may judge from the meagre list given of the species that have bred there; nevertheless the interest is certainly increasing and there is a rapidly growing demand for rare birds.

Canaries, of course, form the bulk of the cage birds imported into the United States, nearly 278 thousand being received, mostly from Germany, in the year ending June 30th, 1906. In the same year some fifty thousand "miscellaneous" birds arrived, of which some 6,000 were Parrots (including Lories, Parrakeets, &c.). The number of Budgerigars imported was 5,387, a few of which were of the yellow variety.

The Java Sparrows imported reached a total of 6,285, Liothrix 4,539.

On the whole the prices of the common foreign birds are much higher in the United States than in Europe, which possibly partly accounts for the small amount of interest taken in aviculture in the United States compared with the Old World.

The author of the report, in concluding, deals with the opportunity for American enterprise that is presented by the fact that so many birds can be bred in captivity, and the large and rapidly growing demand that is springing up for cage birds in the United States. At present this demand is satisfied by importation from abroad, but it is suggested that the industry of raising birds might be established, and the American market

supplied by American breeders. The pamphlet contains a very good coloured plate of a Black-headed Gouldian Finch, which the author calls a "Lady Gould Finch."

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### OWLS OF THE NEARCTIC REGIONS.

The Eleventh Annual Report of the New York Zoological Society contains a very interesting paper on Owls by Mr. Beebe. It is divided into two parts, the first giving an account of Owls in general, in which the author deals exhaustively with their habits, structure, and so forth; the second being a special account of the Owls of the Nearctic region, most of the American species being figured from photographs.

"Only in the last few years," the author remarks, "when our grain crops reach from ocean to ocean, and the devastation of hordes of mice have touched one of the deepest chords of man's nature—his purse—is the Owl getting due credit for his value and economic importance. If every Owl on our Continent was suddenly swept out of existence, it is doubtful if, after a few years, a single crop of grain could be raised successfully. It would take the mice and other rodents and many injurious insects little time to confine all their ravages to the hours of darkness. Hawks would in such an event become almost useless to man, and though weasels and minks might increase prodigiously, yet without the deadly sweep of the Owl, the mice would soon overrun the land."

Dealing with Owls in captivity an interesting point is mentioned regarding the Snowy Owl; special arrangements, we are told, must be made for the birds during the moult, in a hot climate, "they will not moult well or live long if compelled to endure the heat of our southern summer, but if confined to a large flying cage in a cool, dark cellar, every feather will be moulted in as perfect condition as if they had spent the preceding months in their native tundras of the Arctic zone."

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STRAY NOTES BY THE EDITOR.

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The experiment, organized by members of the Avicultural Society, of liberating a number of Crested and other species of foreign doves in the Zoological Gardens, seems to have been quite a success, so far at least as the Crested species (*Ocyphaps lophotes*) is concerned. These birds have apparently bred freely during the summer, one nest, in a tree near the Goose paddocks having produced at least three pairs of young birds. The keeper who feeds the doves told the writer that one morning no less than fourteen Crested Doves were feeding together on the corn he had thrown down. They allowed him to approach to within a few yards, and he estimated that about half of these were young birds.

---

The Roulroul Partridge, or Red-crested Wood-Partridge, of whose nesting habits in captivity Sir William Ingram gives so interesting an account in this month's *Avicultural Magazine* is perhaps the most beautiful Partridge in existence. The prevailing colour is bright green, with a steel blue gloss in the male; the wings are rich brown, and the head black, but ornamented with a long hairy maroon-coloured crest and a white band between the eyes. It is a purely forest-loving species, inhabiting Siam, the Malay Peninsula, Java and Borneo, and in a wild state it lives on berries, seeds, green food of various kinds and insects. So far as I am aware no account of the nest has previously been published.

---

A Correspondent of *The Standard* who, if I mistake not, is a well known Zoological writer and a member of the Avicultural Society, describing Herr Focklemann's interesting collection of wild animals, etc., at Hamburg writes:—"Of late there has been in England a quite justifiable outcry against the condition of some of the bird shops. If all such establishments were conducted on similar lines to those adopted at Gross-Borstel there would be no cause for complaint. The guiding principles are extremely simple—ample space, absolute cleanliness, and plenty of fresh air." Let us hope that the English dealers will take the hint.

---

In *Canary and Cage Bird-Life* of September 20, a correspondent records the successful breeding of Avadavats in his outdoor aviary, three young birds being reared.

"The birds built a domed nest of dry grasses, warmly lined with feathers in the outer portion of the aviary some time about the end of July, in a small privet bush, thick with undergrowth, about 6in. from the ground, and laid four small white eggs, three of which proved fertile."

The young birds, up to about nineteen days were fed by both parents, chiefly on insect food, which they caught amongst the vegetation in the

aviary and living ants' cocoons which their owner supplied. Three young left the nest on September 5th, when eighteen or nineteen days old, and were seen to feed themselves on September 14th.

## CORRESPONDENCE, NOTES, ETC.

### THE KING IBIS.

SIR,—I enclose a photo. of a pair of King Ibis, or Warty-headed Ibis (*Inocotis papillosus*), which I have this summer obtained from India. I understand these birds are rarely kept in this country, though I may be wrong.

The large white patch on the wing-shoulder (hardly visible in the bird on the left side of the photo.), is very conspicuous when the birds fly. The rest of the plumage is brown and dark purple green. The head is nude and covered on the top with red dots. The birds are considerably larger than the Glossy Ibis.

I am told they ought to be omnivorous, but my birds much prefer meat to anything else. I have attempted to get them to eat meal, etc., by mixing it up with the meat, but this is a failure, as they carefully take each piece of meat and wash it in their little pond before eating.

Like other Ibises they are very fond of perching, and of course take small gravel. They seem of an entirely peaceable disposition, and their quaint ways are very interesting. What will be the result upon them of an English winter remains to be seen. They revel in full sunshine. However, as they are now in excellent health and have a good shelter-shed facing South, I am hoping for the best.

C. BARNBY SMITH.

### TANAGERS, ETC.

SIR,—In Vol. VI. (*First Series*), pages 103 and 212 of *Avicultural Magazine* peat moss litter is recommended as being good to cover the bottoms of cages or aviaries in which are kept soft food birds, and a certain firm is mentioned as supplying a special kind for this purpose. I recently wrote to the said firm asking about this peat moss but received no reply.

My reason for troubling you with this note is to enquire whether you could kindly tell me of anyone selling this stuff. I have five Tanagers of the small sorts, e.g. Superb, Emerald-grass, Violet, etc. which I am at present keeping in a cage 5ft. long, 2ft. wide, 3ft. high, back of wood which extends to about 9in. on two ends and top. Sand, I found is of no use for these birds, and sifted earth is not much better.

Whilst on this topic I am anxious, if possible, to ascertain the best mixture for these birds; that sold by Abrahams I notice often mentioned

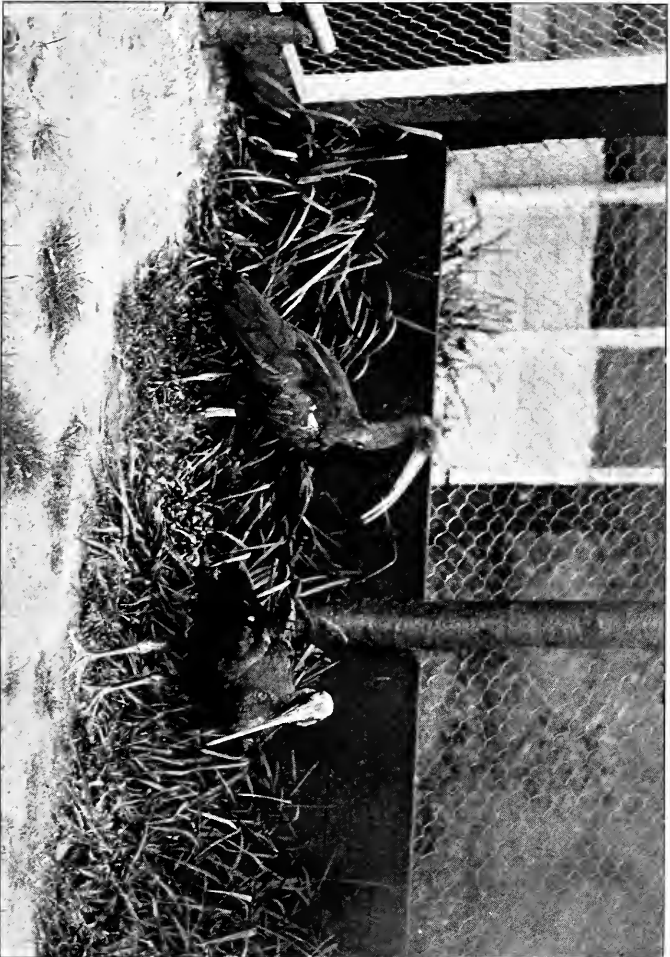


Photo by C. Barnby Smith.

PAIR OF KING IBIS.  
*Inocotis papillosus*.



in the Magazine. I have given Arthur's mixture mixed with potato and carrot to my Tanagers, and this they sometimes eat and sometimes will not touch; but I notice these birds greatly differ in their tastes for food.

I am hoping next year to build an outdoor aviary for Tanagers only. At present in an outdoor aviary with a shelter I have several Gouldians and a pair of Bullfinches, these latter always go to the shelter at night whilst the Gouldians remain out amongst the bushes; this I suppose does not matter, as they choose it of their own will.

A. AITCHISON (F.Z.S.)

*The following reply has been sent to Mr. Aitchison:*

I never use peat moss litter myself and have no idea where you could get it. I always recommend sea-sand (the sharp sand used by builders) for all kinds of birds: I find that it suits my Tanagers very well, although naturally they make it pretty wet with their daily bath. Would not cocoa-nut fibre answer your purpose?

Although, as a rule, Tanagers eat very little beyond the egg and ants' eggs in an insectivorous mixture, I give mine the same food which I provide for all my insectivorous birds, viz.—two parts crumbled stale household bread, one part powdered biscuit, one part egg (either preserved or hard-boiled and crushed through a masher) and one part Trower's "Improved Cecto" or "Century Food." I also give at this season ripe pear and banana and later ripe orange and banana daily. Occasionally insects in some form are given alive, or, if a bird gets out of condition, one or two spiders. Thus fed I have kept two cock Scarlet Tanagers since 1897 and an Archbishop Tanager since the end of 1903 in perfect condition.

Both Mr. and Mrs. Abrahams have passed into another state of existence, I don't suppose the food is now obtainable.

I think if you were to stick some dense brush-wood in the sheltered part of your aviary, you would find that the Gouldian Finches would prefer that to bushes in the open; mine have always done so.

A. G. BUTLER.

---

#### HABITS OF THE CUCKOO.

SIR,—With reference to the interesting article on the Cuckoo, by Mr. Dalgliesh, in last month's *Avicultural Magazine*, I venture to give you some notes regarding the habits of the Cuckoo which I have observed personally.

Some years ago I collected eggs and consequently was always looking for nests. There was a long hedge which was a favourite nesting place for many small birds, especially Hedge Sparrows and Greenfinches. With regard to Cuckoos sucking eggs, I feel quite certain that it does so. I have seen a Cuckoo flying along this hedge and stopping now and then, and on looking at all the nests in it, in the hope of finding a Cuckoo's egg, I found almost all the eggs, in the various nests, sucked, and as there were no other birds, such as Jays and Magpies, in the neighbourhood which suck

eggs, and no other creature about the place likely to do such a thing I came to the conclusion that it was the Cuckoo which had sucked them.

Another thing one would like to know, and that is how many eggs does a Cuckoo lay? I remember finding four in nests comparatively near one another, exactly alike and, as far as I could judge, laid respectively on the 10th, 16th, 19th and 21st of June. The one found on the 16th was considerably incubated, so it was probably laid a few days earlier. I feel certain that all these were laid by the same bird. These were all in Hedge-Sparrows' nests and were brownish-grey in colour. Of course the bird may have laid several more, both before and after.

As to the colour of the Cuckoo's egg resembling that of the foster parent, as far as my experience goes, they very rarely do so. I have found a good many, and none of them resembled the foster parent's egg with the exception of one I found in a Pied Wagtail's nest, most of the others were found in Hedge Sparrow nests and were grey like a Pied Wagtail's or brownish grey. I found one once in a Thrush's nest, another in Chaffinch's nest after the young Chaffinches' had flown, one or two in Robin's nests but not in the least resembling Robin's eggs, and one in a Tree Pipit's nest whose eggs were of the red variety, the Cuckoo's being grey.

I think, as Mr. Dalgleish remarks, the probability is that the Cuckoo could not find any suitable nest and was forced to make use of any one she could find, and in this neighbourhood there never was much choice.

H. JONES (Major).

## POST MORTEM EXAMINATIONS.

### RULES.

Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lanherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, *and a fee of 1/- for each bird*. If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons, and Canaries can only be reported on by post.

BLUE BREASTED WAXBILL. (The Hon. Mary C. Hawke). The bird died of apoplexy.

COCKATIEL. (Miss Drummond). The bird died of concussion of the brain due to direct injury to the skull.

HANGING PARRAKEET. (Mr. Tinniswood Miller). Liver disease of long standing. A hen.

*Answered by post:*

Mr. DELL.

Mr. ARTHUR.

ARTHUR GILL.



### III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

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 Mr. FRANCIS J. PEREGRINE BIRCH; Old End, Ashdown Forest, Sussex  
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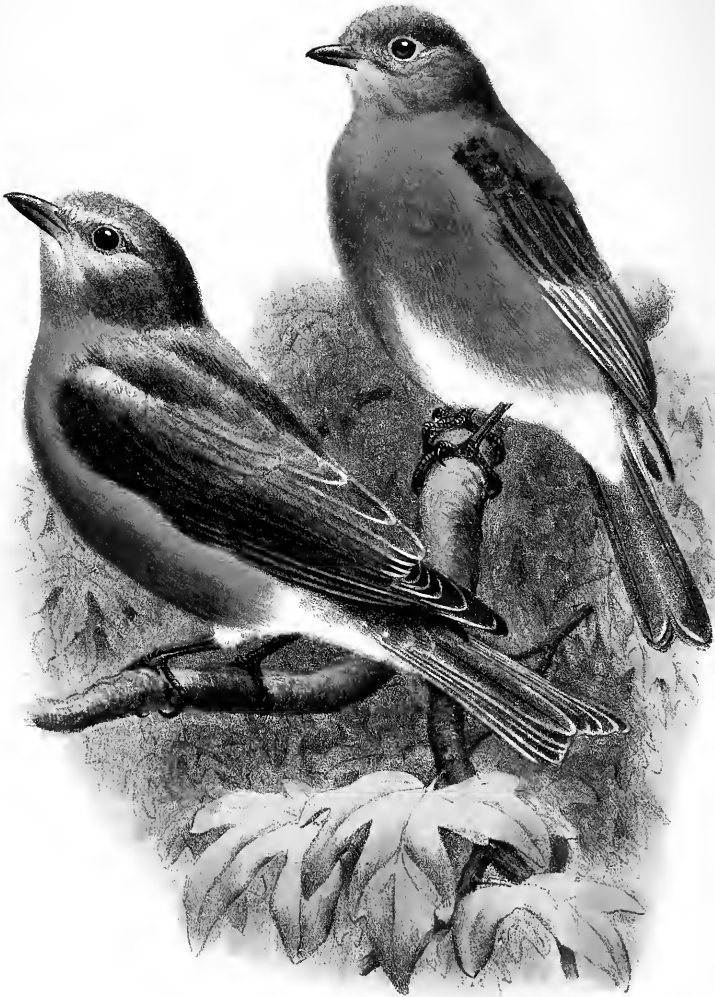
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(Continued on page iii. of cover).





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THE AMERICAN BLUE - BIRD.

*Sialia sialis.*

From life

# Avicultural Magazine,

BEING THE JOURNAL OF THE

AVICULTURAL SOCIETY.

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DECEMBER, 1907.

## THE BLUEBIRD.

*Sialia sialis* (Linn.)

By C. WILLIAM BEEBE,

*Curator of Ornithology; New York Zoological Park.*

To write an essay on the Bluebird is like attempting to describe the face of a dear friend; it is so familiar, so much of its charm has always been taken for granted, that it is difficult to translate into definite words and phrases. In the north-eastern part of the United States the Bluebird is the true harbinger of spring and its beauty of colour and note, together with its friendly habits and love of human habitations endear it to all lovers of birds wherever it is found. The appearance of the Bluebird, or Blue Robin as it is called by foreign dealers, is too well known to require description. Some one has truly said that from its back it reflects the colour of the sky; from its breast, the earth.

In the latitude of New York City, Bluebirds may be observed every month in the year, but those seen in winter are in silent restless flocks, constantly on the move, ever in search of the half frozen berries which mean life itself at this bleak season. The fruit of the poison ivy, catbrier and bittersweet, and the bluish clusters of the cedar are all eagerly eaten. In the southern states the berries of the mistletoe are a favourite item of the Bluebirds diet.

When the first warm days of early March loosen the icicles and soften the snow, the throat of the Bluebird feels the thawing and the first notes of the season are heard. This familiar call-note has well been named the "violet of sound."

It is a soft sweet warble of two or three syllables, almost impossible to put into words but easy to imitate by whistling.

Soon the winter flocks pass northward but we never miss them for their place is taken by others from the south, and this all but imperceptible shifting migration goes on until one morning we see a pair of Bluebirds flying about the hollow in the old apple tree, and we know that the summer residents have arrived.

The courtship is ardent but quickly over and both sexes begin to carry grasses and feathers to the hollow limb or bird-box selected as a nesting site. The song is far from elaborate, being only variations on the call-note, its charm due to the softness and richness of the mellow tones. With the coming of insect life the Bluebird changes its diet and becomes wholly insectivorous. Its favourite haunt is a more or less open, field-like country with scattered bushes and trees. From the summit of a fence-post or low bush it watches the grass and at intervals flies down, snatches a grasshopper or beetle, and is back again.

If a bird box with a hole in the side is set up on a fence or tree it is almost sure to be occupied by a pair of these birds, except where English Sparrows are numerous. Then the Bluebirds have but small chance, and are usually driven away.

About mid-April the warblings of the male cease—a sign that the bird has a nest near at hand. In June, after the young have flown, a brief second season of song may accompany the rather perfunctory renewal of courtship at this time. Even a third brood is not rare, and with the great mortality due to cats, small boys, the elements and other factors of the environment, three broods are none too many to perpetuate the species. Four to six pale bluish white eggs are laid. The same nesting site is reoccupied year after year by the same birds, when by a stroke of good fortune these survive the perils of the southward migration.

The young birds, as is well-known, clearly reveal their turdine relationship by the spots and mottlings on breast and back. They linger for some time in the vicinity of their home and occasionally a youngster of the first brood, still in his juvenile dress, will help feed the nestlings of the second. This unusual altruism is tolerated but unfortunately neither encouraged nor apparently appreciated by the hard-working parents! When the



second laying of eggs follows immediately after the flight of the first nestlings, the male Blue-bird will often take full charge of the latter, besides now and then carrying food to the female or even taking her place on the eggs.

When the last nestlings of the season are on the wing, the family unites in a loose flock with others, and through the autumn, the restlessness of the coming migration keeps them on the move. Sometimes in the late fall, in October or early November, just before leaving for the south, a pseudo-vernal feeling will inspire the parents, and, for a few days, the male will warble sweetly and both will assiduously carry material into the nesting box. This unseasonal effort is soon cut short by a cold wintry blast from the north.

Although so gentle in notes and disposition, Bluebirds do not tolerate too close companionship at the nesting season, and each breeding pair often have a kind of preserve, perhaps of an acre or more extent, over which they exercise proprietorship. They seldom wander or feed outside their imaginary boundary lines. The same seems to be true in a measure of Bluebirds in captivity. At one time last spring I had seventeen pairs, mostly cage-reared birds, hard at work building nests, but only where the number in each flying cage was confined to one or two pairs, did the attempts succeed. Bluebirds nest very readily in confinement and rear their young without trouble. They are so familiar about the door-yards and orchards that they are never caged, and were not even before the present laws prohibited the keeping of them in captivity.

I will give one example of many unusual nesting sites chosen by these birds. A number of years ago, in Reading, Massachusetts, a pair of Bluebirds built their nest in one of the signal balls near the railroad station. Here they successfully raised two broods of young, in spite of the fact that the ball was lowered fifty times a day for passing trains. Every time it descended, the parents flew out and waited, perching near by or flying about impatiently, until the ball was raised again, when they immediately returned to sit on the eggs or cover the young as the case might be.

Our Eastern Bluebird ranges from Nova Scotia and

Manitoba on the north to Florida and Texas in the south, and west to the Rocky Mountains. As in the case of so many other groups of birds, the varied environment of climate and altitude in the far west and in Mexico have produced physical changes in the Bluebirds of those regions. The last haul of the fine-meshed taxonomic net of our systematist reveals two sub-species of our Eastern Bluebird, five forms of the western Mexican Bluebird (differing chiefly in the transposition of blue and chestnut on throat and back), and, most beautiful of all, the specifically distinct Mountain Bluebird, almost wholly blue in colour—cærulean above, pale lavender beneath.

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## THE BLUEBIRD IN CAPTIVITY.

(*Sialia sialis*).

By Dr. A. G. BUTLER.

It would be difficult to say much about the life of this bird in captivity which has not already been said ; but, for the sake of those who have not had the pleasure of keeping and breeding it and who may, perchance, not have read the various published accounts of its aviary life, a brief description of my experience of the species may not come amiss.

I purchased my pair of birds, I think, about 1889, from the late Mr. Abrahams, and turned them into the lighter of my two bird-room aviaries, where they behaved quite amiably towards the other inhabitants until June 1890 when courting commenced. This was carried on in the usual manner, the male bird flying up to the female with a piece of egg or a living insect in his bill and feeding her with it, uttering at the same time a soft barely audible whistle.

Pairing was a very noisy affair on the part of the male bird, and the manner in which he distorted his whole body was extraordinary. I would refer those of our members who have not seen it to Mr. W. R. O. Grant's faithful representation of the courting attitude of *Erithacus rubecula*.\* In this drawing the neck is stretched, the bill pointed upwards, but tail thrown

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\* *Ibis*, 1902, Vol. II., page 678.

forward, an attitude exactly reproduced by our Blackbird before pairing. In the case of the Bluebird the bird stands in a perfectly perpendicular position, the neck stretched, bill pointed upwards, but tail downwards close to the legs which are stretched quite straight, an exaggeration of the posture of a Heron when hiding in the reeds. This posture, accompanied by shrill shrieking, commenced about half-an-hour before pairing took place and was continued for quite ten minutes afterwards.

All my nests were formed in the cigar-nest-box (see "Hints on Cage-birds" p. 41) of coarse hay with a neatly formed but shallow cup for the reception of the eggs; having plenty of materials the nests were usually completed in one day. The number of eggs deposited varied from three to five of a dull blue colour somewhat similar to that of the eggs of our Wheatear, but shaped like our Robin's eggs, only smaller. The small size of the eggs is indeed somewhat surprising when compared with the bulk of the bird that lays them.

Incubation lasted thirteen days and the hen came off the nest repeatedly, that is to say whenever the male bird brought her a delicacy; she never fed in the nest but always left the eggs to eat; nevertheless in almost every instance all the eggs were hatched, so that, if I had been living in a good country for grasshoppers I should have probably reared quite a colony of Bluebirds; but that is the trouble with this and many other insectivorous birds, they will insist upon living insects or spiders as food for their young. The Bluebirds did indeed give a little yolk of egg and a few small earthworms when nothing else was available; but, unless plenty of insects or spiders were added all the young died. Thus it came to pass that from my first nest of three, only one young one was reared; and afterwards although, up to the end of 1903, I had as many as three nests in a year, not one young one lived to leave the nest, some died in two or three days, some when half grown and one or two almost full-feathered. I was taking holidays at home when my first birds were hatched, and therefore was able to spend the whole day in ransacking my own and neighbours' greenhouses for spiders, but afterwards I was compelled to supply living food morning and evening, leaving a saucer of earth well stocked

with small earthworms for the birds to feed with, and these were insufficient for their needs.

I noticed that, when giving insects of a dry nature like house-flies, moths, or butterflies, the Bluebirds invariably swallowed and regurgitated them several times before offering to the young; spiders or cockroaches were broken up, the bodies swallowed once or twice and the legs subsequently eaten by the parents; apparently caterpillars and chrysalides were smashed, swallowed once and then regurgitated into the mouth of the young. I never saw insects given alive, as captured.

According to A. Hermann (*Vide Russ, "Fremdl. Stubenv."* Vol. II., p. 309) the young leave the nest when 16 to 18 days old and feed themselves 14 days later, but my bird did not leave the nest until 23 days old and could then flutter about fairly strongly; he was perfectly able to feed himself from eight to ten days later and his parents insisted upon his doing so. Later in the year, the Bluebirds having become somewhat aggressive towards other birds in the bird-room, I transferred them to a covered aviary which was then open on one side to the open air; here the young bird acquired his adult plumage, but of course not the full adult size of his parents; later in the year he caught a severe cold and died; when opened the liver and spleen were seen to be freely studded with miliary nodules. The following year I gave my Bluebirds a small aviary, almost to themselves, their only companion being a Red-vented Bulbul; later I had to remove this bird as he insisted upon feeding the young Bluebirds and viciously attacked their father.

The nestling plumage of the young is much more ashy than the mother bird and the breast is distinctly spotted, so that Dr. Russ' statement that "the young plumage is altogether different from that of the old birds" is justified. On acquiring its adult colouring the young male bird resembles its father, but its bill still remains broader than that of its mother.

In an outdoor aviary I should expect to be able to breed Blue-birds without much difficulty; they would then be able to supplement the food which I could supply by the insects which they would themselves capture and the earthworms and other crawling things which they would dig out of the earth, but to provide for them in an indoor aviary is heartbreaking work.

My old birds both died in 1899, having been in my possession about ten years ; they were about as pleasing as any birds I ever possessed, utterly fearless, ready at all times to fly down and take dainties from one's fingers and showing very little anxiety even when one looked into their nest and examined their young ; indeed with one of my nests I tried to help the parents by dropping egg-food into the mouths of the youngsters ; the cock bird flew down to see what I was about, uttered his soft call note, and then flew away apparently quite satisfied that I was doing no harm to his family. I believe that, when bird-owners warn one never to approach a nest with young lest the parents desert them, it is often true as regards those particular bird-owners ; but it is a known fact that with some of us our feathered friends are far more trustful, they instinctively feel that we shall not hurt them and they soon cease to be at all alarmed. I have had so many tame birds in my time that I feel sure that I can safely run risks which many breeders would not venture upon. I have more than once had birds tame enough to eat from my fingers three days after their capture, and I do not think there are many aviculturists who could say that excepting perhaps in the case of the English Robin, which, in its wild state, has been known to take meal-worms from the fingers. I have not tried this in the open garden, but I have with a newly caught Robin in an aviary, which hopped up with the greatest assurance and snatched the grub out of my fingers.

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## RED-CRESTED CARDINALS AT WOBURN.

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The DUCHESS of BEDFORD writes:—

“ A year ago we turned a lot of Red-crested Cardinals out and a few came to feed on my bird trays throughout the winter.

“ They nested in the tops of the Cedar trees in the garden and brought up one family, a second being destroyed by Jackdaws.

“ We turned out more this summer, but a second lot arrived so late in the autumn that we decided to keep them through the winter in an outdoor aviary.

“ Both the Red-crested Cardinals and Saffron Finches survived the winter at large in the garden.”

FEMALE REGENT BIRD ASSUMING MALE'S  
PLUMAGE.

As may be seen on reference to our December number for 1905, pp. 58-9 of vol. IV of our New Series, in January, 1903, certain Regent Birds, *Sericulus melinus*, came into my hands.

The particular Regent about *which*—alas, I can no longer venture to say *whom*—I now propose to write was referred to by me in Nos. 2, 3, and 4 of vol. IV as “a smaller and very flighty creature” (p. 63), “eccentric second female” (p. 64, note), and generally as the second or odd female. At pp. 63-4 I mentioned how, during the spring of 1905, the male had paid court to her, how they had been shut up together for nesting purposes, and how, on May 18, she had been frightened into a fit by a Long-tailed Whydah and had had to be removed; how (pp. 66-7), later in the season, the male had again made up to her but breeding had been stopped by the increasing cold of the advancing winter. And, once more, last March, at p. 142, I mentioned how the young male had courted her, and had died prematurely after a fit on February 15-16.

This bird, it may be perceived, had suffered various disappointments; and the sudden death of the young male must have given her a grievous shock; and it is hardly to be wondered at that her health suffered materially.

For some time she was dull and listless. During May she became exceedingly restless, both by night and day, and seemed to be filled with a desire to be off and away after a mate. During June I became aware that the bill had changed its colour to a decided yellow. During June—July, four flights were cast, the herald of approaching moult. On July 26, I had occasion to handle her, and found that the two new primaries on each wing which were replacing the cast feathers were black-and-yellow—and then the bitter truth flashed upon me, the bird was assuming the plumage of the adult male!

This female Regent is now (mid-October) in the plumage of the fully adult male, not a feather of the female dress remaining; the yellow shield on either wing shews a few black streaks, which mark the course of the black heads of some flights as they push their way forward but have not yet come fully into line

with their fellows, but practically the plumage is complete. The only external differences between it and a true male are that the bill, although yellow, and at one time bright yellow, is now not nearly so clear and bright as a male's should be, and that the yellow of the head does not show so much of the rich red-orange that makes the colouring of a good male so attractive; the eyes, too, are comparatively but of a feeble yellow.

It is rarely that one has opportunity of noticing the precise course followed by moult over the body of a bird; and a few brief notes on this point may not be out of place. It must be remembered that in this case every feather, the large and the small, has been replaced by a feather of a totally different colour, so that the appearance and growth of every new feather could be detected and watched. In the spring, it was a "gaudy buff and brown" bird, now its colour is "sober black and yellow." For the sake of brevity, I shall refer to the old plumage just as buff or brown.

The first change of colour appeared among the flights; and a few of these, as already stated, are still not quite fully grown, the last of the old plumage, a secondary, not having been shed until October 12. Year after year, I have observed how a primary or two would be dropped by the Regents quite early in the summer, long before there was any appearance of moult, and how the flights would continue to be shed, practically in pairs, right up to the verge of winter. Possibly our cold climate may be in part responsible for this; but, personally, I regard it rather as one of those beautiful provisions of what we materialistic heathen of the present day call "nature" (with a small "n") which enables a shy and timid creature with many enemies to retain its powers of flight unimpaired all through the moult.

As regards the body feathers generally, including the wing-coverts, the black first appeared on either side of the chest, and was immediately followed—possibly accompanied—by some on the lower back, or around the root of the tail. From these three centres the black gradually extended; not in any instance did a black feather crop up at random—each spot spread as a sore. By August 17, there was quite a large patch of black on each side of the breast, and another on the back; one black feather was

appearing in the centre of the tail ; and the eyes were yellowish. By September 2, the two breast patches had joined just below the chin (which was black), but all down the centre of the under side there remained a dividing line of buff ; and more black feathers were to be seen in the tail. On September 9, only a tiny touch of the buff, in the centre of the chest, remained on the actual body, and every brown feather had disappeared from the tail, which now, however, although wholly black, was far from being fully grown ; the cheeks, &c., were still buff. On September 14, the body was entirely black ; a little buff remained on the sides of the face and neck ; the former had disappeared by the 17th. The last of the old feathers (excluding flights) clung in a little patch on to each side of the neck ; and it was not until September 25 that the plumage of body, head, and neck could be pronounced to be complete. The tail was full-grown by October 7, but the flights were not so until some considerable time later.

There was one curious phase in the course of this change of feather, one of more than passing interest to those who think.

By the way, but in this connection, why should the feathers of a bird be often of one colour on one part and of a totally different colour on another bordering upon it, no actual dividing line existing between the two colours, although the nominal line of demarcation between them is clearly and sharply drawn ? and why should this distinction be continued and maintained through countless generations without deviating by a hair's breadth, and such a patch in the male (of species that have the sexes nominally alike), sometimes, be a trifle longer or larger or something than the corresponding patch in the female ? We need not go farther afield for an illustration than a good living example of the common Java Sparrow. What can be more definitely and precisely defined than that white patch on each side of the head ! Why should this patch remain the same, without encroaching or being encroached upon, moult after moult, generation after generation, in countless thousands of specimens ! Of course I am referring to healthy natural birds, not those that have been tampered with by man. And so the Regent. The adult male has a broad irregular band of orange-yellow running from the base of the upper mandible over forehead, crown, nape, and hind-neck to the mantle,



which proves an insurmountable obstacle (but why?) to the flow of the golden stream. At this point, the latter surges up, prevails over and overflows the upper part of the sable barrier, then, beaten back, runs off to right and left, forming a half-collar. From time immemorial, the glorious light has been waging fierce war here against the pitchy blackness of the mantle, but has not advanced by the breadth of a line. The gold impinges upon the black which everywhere hedges it in, and comes just down to such and such a point, but not one jot or one tittle beyond. A spike or prong of yellow projects into the black behind the eye, and seems to be just on the point of making an inroad,—but when has it been otherwise, and when is it going to make any progress? Just so far shalt thou go and no farther is the decree, and we can only accept it and wonder. This irregular “shape” of yellow grows absolutely true to type about the head and neck of every adult male Regent, year after year and generation after generation. One *result* of this beneficial decree I referred to in December, 1905 (pp. 55-6), and it makes us marvel the more. The golden glory appears only on the upper parts; and the courting male knows full well how to shew it off to the best advantage. But the same bird, when hiding from an enemy, has only to squat on a high perch and expose the sombre underparts to the foe, and he remains invisible, for not the tiniest streak of tell-tale yellow has been permitted to grow where its brightness might endanger the safety of the wearer.

And now comes in the curious little episode in connection with my suffragette.

Up to and including August 18, the entire head and neck all round was that of the female Regent—not an old feather had been lost, not a new one had been gained. But, on the following morning, a startling change was apparent, and most conspicuously so. My first impression was that the bird had met with an accident during the night and had scalped itself, but closer inspection shewed that nothing of that kind had occurred. The broad track of feathers referred to above, from bill to mantle, was bare of feathers, not so much as the ghost of a feather remained. The entire patch, but that only, which in the adult male is yellow, had lost every feather, and was there all ready for the yellow feathers

to grow ; and on the very next day the crown region was tinged with the glorious yellow-orange, which in due time filled up and occupied its allotted space. But of the feathers which bordered the track, not so much as one had been shed ; these buff feathers reared their heads conspicuously aloft, like the high grass on each side of many an African path, and were only slowly and gradually replaced by the black feathers, some of the buff remaining on the cheeks as late as September 14, and not being reported clear until the 17th. Why should this block of tiny buff feathers from one particular part be cast all together, to make way for a crop of yellow ones, while all along, on each side of the track, feathers of a like size and colour, separated from them by no visible dividing line, held their ground well, and only slowly, and as it were reluctantly, gave way to the on-coming growth of black ? It is something more than passing strange.

Another point must be noticed. Whereas the normal male Regent takes not less than two annual moults to change from the immature to the adult plumage, this nondescript creature has jumped from the old feather to the new by one single moult.

Small blame to them, then, that the members of my household, accustomed for years to seeing this female going about in sober and modest apparel, on now beholding a gaudy damsel flouncing and bouncing about, should mutter such words as "unnatural," "weird," "uncanny," "false," "brazen faced hussy," and the like. It is a Jackdaw in Peacock's feathers, a wolf in sheep's clothing. It is not a male, nor a female, but a "thing" ; it is not a he, nor a she, but an "it" ; it is neither fish, flesh, fowl, nor good red herring. Alas, my masters, what is to be done with this abnormal monstrosity !

REGINALD PHILLIPPS.

N.B.—As I see this bird, day after day, flying about to all appearances a true male, it is natural to ask—Can any mistake have been made ? The only possible one that I can suggest is that the bird who died last February was the second female, and that it is the young aviary-bred male who survives. When the shadow of death falls on a bird, it is a very different creature from what the same bird was when full of life and vigour—but *the survivor seemed to be certainly the well-known female.* More-

over, the gentleman who kindly made the *post mortem* examination of the deceased wrote me that it was a male. And, regard the case as we will, we cannot escape from the fact that the bird passed from the one plumage to the other by a single moult. The more I consider the *pros* and *cons*, it seems to me that my view meets the difficulties of the case better than any other, even regardless of my long acquaintance with the second female.—R.P.—Nov. 8.

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## THE BLACK COCKATOO.

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In the June number of the *Avicultural Magazine*, I noticed a quotation from *The Emu* to the effect that the Black Cockatoo “had shredded the bark off the dead eucalyptus and that it was noted that only dead trees were worked upon.” I think that the above might convey a wrong impression as to the habits of these birds. They certainly do attack the “stringy bark” in the way shown in the photo in *The Emu*, but they also treat living trees in the same manner. I may say that I have seen hundreds of living trees, which presented the same appearance except that the bole only of the tree was attacked. These birds are very fond of the larvæ of a large moth, the grubs, which are three or four inches long and about one inch in diameter, eat their way into the Wattle Trees, and the Cockatoos tear large pieces of the bark and wood off the trees in their endeavour to obtain these titbits; these trees are invariably alive, I doubt whether the Black Cockatoo even with the great power of their bills could get one of these grubs out of a dead wattle tree.

It might interest members to know something of the nesting habits of these birds. They build in the hole of a lofty eucalyptus tree, generally between 80 and 150 feet from the ground, making no nest to speak of, pulverising the rotten wood to the depth of half an inch or so at the bottom of the hole, the eggs being generally placed about two feet from the outlet. I have a pair of eggs before me as I write, they were taken six years ago in the Midlands by a shepherd, they are dull white, in shape oval, and measure (1) 1·90 by 1·40 (2) 1·91 by 1·26. The

eggs are considered rare and I only know of three or four sets being taken in Tasmania. I have never seen a Black Cockatoo in captivity, and do not know how they would manage, without their usual diet.

I have found only two nests during a period of thirty years and, strange to say, both were on the slopes of Mt. Wellington, within 8 or 9 miles of Hobart; though of course in secluded gullies and out of the tract of the ordinary run of mankind or even school boys. One of these nests contained two young ones when found in February, and in the other the birds were sitting late in December; on visiting the former nest about a week later the two young birds were observed, the parents still feeding them and they still retained a fair amount of black down on the back and breast, the following week they had disappeared, most probably having retired to the highlands round the Southern end of Mt. Wellington. .

I hope that these few notes will be of some interest to members as I am afraid that it will be many years before any one succeeds in keeping these birds in captivity, much less in rearing the young.

A. L. BUTLER.

*Hobart, Tasmania,*

*Sept. 23rd, 1907.*

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## AVICULTURAL NOTES FOR 1907.

By ARTHUR G. BUTLER, Ph. D.

My article published in the August issue of our Magazine brought my notes on the present year's experiences up to July 4th, at which date I had not reared a single bird in any of my aviaries, although I had heard one young Cockatiel being fed and a pair of Tambourine Doves had left the nest and been starved to death by their parents.

On the 12th I saw my Diamond Doves feeding young, one of which left the nest on the 15th and was reared. My Satin Bower-bird was taken ill on the 12th and died in the middle of the day following. I sent it to be skinned and a *post mortem* examination proved it to be a cock bird, thus partly confirming Mr. Le Souëf's statement as to the cocks dying within a year or

two after assuming the adult plumage, but at the same time revealing a very curious fact in relation to this species:—

Briefly to review the history of my two Bower-birds, I may note that the supposed pair (palpably in nestling plumage, both small and with indications of pale spots on the green plumage), came into my possession in September, 1899, and at the end of a year one had assumed the adult plumage of the male, the other the adult plumage of the female. Naturally I concluded that I had secured an undoubted pair, although both sang and danced; and though they certainly quarrelled, that fact in no way disturbed my faith, because from my boyhood I had been taught that “the quarrels of lovers are the beginning of love.”

When in July, 1904, the supposed hen began to assume male plumage and became so spiteful that I had to remove the undoubted cock, I concluded, as a matter of course, that disease of the ovary was affecting her plumage (see my short paper in the “Annals and Magazine of Natural History,” ser. 7, Vol. XVI., pp. 350-351). Later the perfect male plumage was acquired and retained permanently, and exactly three years later the bird died and proved to be a cock.

Why some cock birds should assume male plumage at the end of the second year, and others should disport themselves in female attire for six years or longer, is a problem which requires a good deal of explanation. My birds were only two out of half-a-dozen or more, all palpably young birds, imported in one batch.

On the 15th, I lost a Yellowish-finch, which, from its bright plumage, not I only but other aviculturists had decided to be a cock bird; it had built a nest in conjunction with a duller bird in the same aviary, but no eggs had been laid; examination after death proved it to be a hen with well-developed ovary; so that bright colouring in this case probably indicated advanced age and not sex; it is a rather large bird.

On the same day, the first young Diamond Dove having left the nest, the mother laid an egg on the ground; and the second egg laid on the 16th fell out of the nest and was smashed. The cock fed the young bird until he could look after himself. On the 25th one young Cockatiel flew; it insisted upon its

parents feeding it for a month afterwards, and proved to be a cock.

August 8th I again saw a young Tambourine Dove on the floor of the aviary, which fluttered away just above the ground as I approached it. This bird was reared and became so extremely wild that it was a marvel to me that it did not break its neck. Directly I opened the aviary door it would fly at full speed straight for the wire netting and get hurled back head over heels with the force of the impact. I keep it in a cage now to calm its fears. The other bird from the same nest died soon after leaving the nest, and when I found it the flies had been at it. On the 12th I saw a hen Gouldian Finch peering into a nesting-receptacle and hoped that my Pintail Nonpareils had gone to nest. It was a vain hope, for though they often examined several receptacles and I left them outside until nearly the end of October, they did nothing.

In this month the Diamond Doves went to nest for the fourth time, two young leaving it on the 30th; both were reared. The parents laid again on September 21st and 22nd, but broke both eggs and gave up breeding on October 9th.

On September 28th I again saw a young Tambourine Dove on the floor, and on the 30th I saw the pair together, but on October 2nd the smaller bird (probably the hen) had disappeared, and I saw it no more; the other seemed to get on well for a time in spite of heavy rains, but on the 9th I found it cramped and unable to walk. As it could feed itself I took it indoors and caged it, putting it into a box of hay every evening; it partly recovered and lived until the 23rd. The quills and tail-feathers attained almost to their full length, but the sheaths were not shed. Then I found it dead. Thus of six young Tambourine Doves which left the nest this year only one was reared.

During September my pale form of Hangnest *Icterus vulgaris* (*limoneus*) moulted and bore out my statement that the colouring of these birds when properly treated tends to deepen in captivity. In fact it is now more deeply coloured than my old bird, which moulted in October, but is still distinguished by its more slender build, the small triangular naked patch behind the eye in place of an orbital ellipse round the eye and the white

edges to the outer webs of the external tail feathers. Of course the difference in song continues. As I rejected some of these characters on the ground that some of the deeper-coloured birds possessed them, the question now arises as to whether, after all, they may not be of importance. The change of colour from pale to dark, certainly seems to render the validity of *I. curasoensis* as a sub-species somewhat doubtful.

On the 27th I brought indoors the birds in my small outdoor aviary, but left those in the larger aviary outside. Two hen Weavers died during the year in consequence of damp and cold fogs, but they were old birds which had been kept indoors for many years.

On October 30th I received a pair of young Chingolo Song-Sparrows, very kindly presented to me by their breeder, Mr. W. E. Teschemaker.

The fact that reliance upon colour characters alone caused me to sex incorrectly both a Bower Bird and Yellowish-finch, clearly evidences the importance of studying the external structural differences in the sexes of birds. No doubt a comparison of the beaks of undoubted sexes of *Ptilonorhynchus* would reveal differences of outline. In *Sycalis arvensis* on the other hand the beaks differ very slightly, not sufficiently to be of any value in deciding the sex. A cock bird which I lost in 1905 is a large and dull-coloured bird, but one which died in 1901 was a trifle brighter, much smaller, and has the front margin of the wing towards the shoulder bright yellow; the female which died in July shows an indication of this yellow edging but is a slightly larger bird than the cock and with more yellow on abdomen and thighs; whereas the chin of the cock bird is yellow, in the hen it shows an orange tinge. The large male would be typical *S. arvensis* and the small brighter pair *S. minor* only the male of the latter came home in an Argentine collection, probably obtained at Buenos Ayres. Both of the smaller birds have paler lower mandibles than the larger bird. I must confess that, with the exception of *S. luteiventris*, in which the outer tail-feather is obliquely marked with white, I have little faith in the validity of the sub-species of *S. arvensis*, knowing as I do how enormously *S. flavicola* varies in colouring at different ages.

So long as it can be proved that a certain type is constant to locality, and not connected by intergrades with any other, I have no objection to it being regarded as sub-specifically distinct, though I should prefer to call it a distinct species; but when, as is admitted to be the case in many of the so-called sub-species recognised in the United States, the greater number of the named forms grade into each other and require to be arbitrarily fixed by geographical boundaries, no difference being discernible, the whole thing ceases to be scientific and resolves itself into a sport no more elevating than that indulged in by children, when they sort marbles by size and colour, in both cases no doubt it educates the eye, and that is all that can be said in its favour. The old system in which a species was described as "widely distributed, becoming larger and brighter towards the westward extremity of its range," answered every scientific purpose without cumbering the ground with useless multitudinous names, and adding greatly to the labours of the museum student and cataloguer.

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## NOTES ON AVICULTURE IN GEORGETOWN, DEMERARA.

By E. WILLIAM HARPER, F.Z.S.

(Continued from page 38).

The Tanagers or "sackies" naturally on account of their beauty alone claim many admirers. Those most commonly caged are the Blue (*T. episcopus*); the Palm or "brown sackie" (*T. palmarum*); and the Violet or "yellow-bellied canary" (*Euphonia violacea*). Others less common are the tiny Pigmy (*E. minuta*), first introduced into England by Captain Pam, and differing from *violacea* in its smaller size and by having a purplish-black throat instead of a yellow one; the Maroon or "cashew sackie" (*Ramphocelus jacapa*), with its Chaffinch-like cry of "fink, fink"; the Magpie or "French sackie" (*Cissopis leveriana*); the Black; the Great Saltator or "tom-pitcher" (*Saltator magnus*), in which birds of the year have the eye-brow streak yellowish green, changing later to white; the Blue-and-Black (*Calliste braziliensis*);



the Yellow-bellied or "goldfinch" (*C. flaviventris*); and the Black-cheeked or "buck-tongue sackie" (*C. cyanea*). The last-named is a very quarrelsome species: the hens are continually "swearing" at each other; while the cocks lock themselves together with beak and claw, rolling on the floor of a cage in a murderous embrace.

Generally speaking, no food but fruit is given to Tanagers; consequently those species which are largely insectivorous do not thrive. This fruit diet is, however, an improvement upon the universal pea-meal paste or "satoo," which is used in the East. I regret to state that water is not in many cases given to frugivorous birds; but on account of the succulent nature of the fruit, they do not seem to mind the abstinence.

Of Sugar-birds, the following species are occasionally kept: The beautiful Yellow-winged (*Cœreba cayana*), and the Black-headed (*Chlorophanes spiza*); and I secured the only pair I ever saw of the tiny Yellow-breasted, or "kiskadee sackie" (*Certhiola chloropygia*). Two of my Yellow-winged Sugar-birds were captured at the top of the Demerara light-house shortly after midnight, on two different occasions. What the birds were doing out at such a demoralizing hour I can't imagine—unless they were merely migrating. Young males of this species are green like the adult females; and old males lose their gay colour at certain seasons. Some descriptions of this bird give the colour of the legs and feet as "ruddy flesh-colour." This has evidently been taken from a faded skin; the legs and feet in life being bright coral-red.

I was extremely astonished on one occasion to be told that a man had a pair of "Nightingales" for sale; and, upon expressing a wish to see them, welcomed instead a pair of Red-whiskered Bulbuls! They had just arrived on a coolie-ship from Calcutta, and, in spite of their long voyage of about three months, were in perfect condition. I only saw one pair of Red-crested Cardinals (*Paroaria cucullata*).

Humming-birds were never successfully kept; but, as they were sometimes caged, perhaps they ought to be mentioned. Upon a diet of sugar and water, they can exist for varying periods up to about seven weeks. At times they were offered for sale

freshly-caught, tied by one leg to a piece of cotton a yard or two in length; the poor bird hovering and "humming" at the full extent of its tether, reminding one of a boy's tiny kite. They were captured by hand inside houses, into which they had darted, and were also "limed."

The family *Icteridæ*, with which the colony abounds—taking the place of the Starlings of the Old World—contains a few favourite cage-birds. The commonest is the Cow-bird (*Molothrus atronitens*) called locally the "corn-bird," "rice-bird," and "lazy-bird": the last mentioned name is derived from its Cuckoo-like parasitic habit of laying its eggs in other birds' nests; its host being the tiny Wren or "god-bird" (*Troglodytes fulvus*). The male Cow-birds sing fairly well, often to the accompaniment of much wing-flapping. They have the babbler-like habit of holding down the head in front of another bird in an inviting attitude, implying that they wish to be tickled; at the same time raising the feathers of the head and neck.

The Black Hangnest (*Cassidix orizivora*) sometimes seen, is like a large edition of the Cow-bird, both in its glossy black plumage and in its habits. It, too, is parasitic; its hosts being the Crested Hangnest or black "bunyah" (*Ostinops decumanus*), the Green "bunyah" (*O. viridis*), the Yellow-backed Hangnest (*Cassicus persicus*), and the Red-backed Hangnest (*Cassicus affinis*)—the two last-mentioned species are known locally as "Mocking-birds." All four of the Black Hangnest's hosts make long purse-shaped nests, and are occasionally met with in captivity; but their comparatively large size somewhat handicaps their popularity.

At certain seasons, dozens of Yellow-headed Troupials, or "Yellow-headed Corn-birds" as they are called (*Xanthocephalus icterocephalus*) are offered for sale; but, as they are fed on grain only—paddy-rice and oats—they do not long survive. The Red-breasted Marsh-bird (*Leistes guianensis*), the local "robin," has a correspondingly short life in captivity for the same reason; whilst the Golden Hangnest or "yellow plantain-bird" (*Icterus xanthornis*) dies in even less time by being fed upon nothing but plantain, a kind of banana. One of the most expensive of the colony's cage-birds is a beautiful orange and black Hangnest (*I. croconotus*),

which is brought down to the coast from the borders of the Brazils and known as the "Troupial." The Yellow-crowned Troupial or "Cadoorie" (*I. chryscephalus*) is a great favourite, being prized for its song. When travelling in the interior, up the river Demerara, I learnt from the aborigines that they rear the "Cadoorie" and other insectivorous birds upon river-fish. It is first roasted and then chewed before being given to the young birds. Unfortunately, when the birds are taken down to the coast and pass into other hands, they are soon killed through being improperly fed. I have often seen slices of raw meat an inch long in their cages, with which to supplement their ordinary diet of sour bread-and-milk.

The last of the Icteridine family to be noticed is the Black Troupial (*Quiscalus lugubris*), or colonial "Blackbird." It appears to be an almost omnivorous feeder; in Barbados, where I spent three days on the voyage home, I saw it turning over horse-dung in the streets, searching for grain. It is protected by law in that island, and is the commonest town bird there.

The only species of the beautiful family *Colingidæ* which I saw in captivity during the three years I was in Demerara, was a single specimen of the lovely Cock-of-the-Rock (*Rupicola crocea*)—a young hand-reared bird in black baby plumage. The chief adornment of the adult, the cinnamon crest, was little more than a slight ridge of dark feathers on the crown of the young bird. Its mode of progression was by hopping, not walking. I was informed that about twenty years ago two or three dozens of these handsome birds were on the market at one time; but since then only two or three specimens had been seen in town.

I tried hard to induce the dealers and aborigines to procure for me some of the other beautiful Contingas—the Purple-breasted, Purple-throated, Crimson, Crimson-breasted, Crimson-throated, Pompadour, etc., which are all found in the interior—but without success. I only hope that some or all of these beautiful species may eventually find their way to English aviaries.

For the correct identification of the only Thrush (*Turdus murinus*) I saw caged, I am indebted to our esteemed member, Mr. H. D. Astley.

Doves are not held in much esteem in Demerara. The

common Barbary Dove (*Turtur risorius*), the Talpacoti Ground-Dove (*Chamaepelia talpacoti*), the Dwarf Ground-Dove (*C. griseola*) and the Red Under-winged Dove (*Leptoptila griseola*) are all occasionally to be seen.

The Tinamous or "maams" are more sought after for culinary, than avicultural, purposes; and the natives were much interested to learn of their polyandrous habits—discovered first, I believe, by our worthy Editor. Their eggs have been brought to me for sale on two or three occasions. The Brown Tinamou (*Crypturus cinereus*) is the only species I saw in confinement; it used to utter its shrill cry about four o'clock in the morning.

Coming next to the Cracidæ, the following must be mentioned: the Crested Curasow or "powis" (*Crax vector*); the Marail Guan or "marudi" (*Penelope marail*); the Piping Guan or "white-headed marudi" (*Pipilo cumanensis*); and the Little Guan (*Ortalis motmot*) or "hanaqua"—so-called from its cry which consists of the word "han-a-qua," repeated several times in a loud voice. All the birds of this family met with in confinement are hand-reared by the aborigines, and are consequently very tame. A Little Guan which was given to me was so tame that it was allowed complete liberty; it fed with the poultry, and roosted at night overhead in the trees. It resented the intrusion of strange fowls, and would fight fiercely with cocks much bigger than itself; but they were seldom able to strike a blow, because their smaller and more agile adversary would fly high in the air above their heads. This bird had a bad habit of sneaking into the house and eating condensed milk, butter, fruit, or anything tasty; although it shared in the fowls' *ménu*. It had full use of its wings, and would sometimes be absent for two or three days at a time.

A tame Trumpeter Bird (*Psophia crepitans*) can sometimes be seen walking in its stately fashion along a quiet street. That extraordinary bird, the Hoatzin, I was unable to obtain; although it is common in the adjoining county of Berbice. Its local name is the "Cangë Pheasant."

The Martinique Gallinule (*Porphyriola martinica*) and the Spur-wing (*Jacana jacana*) were both brought to me for sale: they thrive on a diet of soaked paddy rice and shrimps.

With a brief allusion to some of the Ducks of Georgetown, these notes—which have already reached a greater length than I had intended—must close. The Muscovey Duck (*Cairina moschata*), indigenous to the colony, is domesticated; and breeds freely with the common duck. Two other species of ducks are often seen in a state of semi-domestication—being reared from the eggs of wild birds—namely, the Guiana Tree-duck or “vicissi” (*Dendrocygna discolor*); and the Blue-winged Teal (*Querquedula cyanoptera*).

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## AVICULTURAL NOTES FOR THE PAST YEAR.

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The past season with its cold spring and dull damp summer has not been very favourable to successful aviculture in outdoor exposed aviaries, and the fact that several of our members have been so successful in rearing rare birds speaks volumes for their skill.

For my part I have not been very successful, the number of young birds reared in my aviaries being considerably below the average. The following notes may however be of some slight interest.

The Smith's Partridge Pigeons were the first to commence nesting, but entirely unsuccessfully, as already recorded (Vol. V. p. 292).

On April 20th the hen Many-coloured Parrakeet, which has been with me for eight years, commenced to sit, hatching, in due course, two young birds, both of which however died in the nest. The male is a new bird, imported in 1906, the original male to the old hen having died early that year. He may not have sufficiently settled down to feed the young properly, as the old hen has never before failed to rear her brood. Or possibly the failure was attributable to the cold weather.

I reared so many Quails last year that I was hopelessly overrun with young birds at the end of the season, and I decided not to breed any pure-bred Quails this year, but to try and breed some hybrids. I therefore tried to cross the Harlequin (*C. delegorguei*) with the Australian (*C. pectoralis*), and Harlequin

with Rain Quail (*C. coromandelica*). The hen Pectoral laid two clutches of eggs but entirely refused to sit, although the eggs, or at any rate one egg, tested in an incubator, proved to be fertile.

In August, seeing that my attempts at hybridization had failed, I replaced a hen Harlequin in the aviary, and within a fortnight she had commenced to lay in a beautifully concealed spot in a clump of grass. On September 10th she brought off a brood of seven, three eggs containing dead chicks being left in the nest. All seven chicks have been successfully reared, and have turned out to be all cocks except one !

The little Olive Finches (*Phonifera lepida*), to my mind some of the most charming birds one can keep in a large outdoor aviary during the summer months, have reared no less than eight young birds. The first brood consisted of two young birds which unfortunately were left in the same aviary when the parents had gone to nest a second time.

The second brood resulted in three young birds, and immediately these left the nest the parents turned upon the two young birds of the first brood, and in a few days these were found dead, apparently worried to death by their parents. Profiting by experience, the young of the second brood were transferred to another aviary when they could take care of themselves, and these and a third brood safely arrived at maturity.

Two young *Turnix varia* were successfully reared by hand as already recorded (Vol. V. p. 303).

Two hen Bourke's Parrakeets, both paired to the same cock, nested in separate logs in the same aviary. One nest resulted in four young birds and the other in two, all of which were reared, though three died long after they had reached the age at which they could feed themselves. Damp weather does not agree with young Bourkes in an open aviary.

On July 23rd, two young Parrot-finches left the nest and were successfully reared ; the red markings on one of these being almost as extensive as in an adult, though of course much duller.

September 5th. One young Yellow-rumped Finch (*Munia flavipectus*) left the nest. This young bird was seen to feed itself on September 18th, but the parents continued to feed it for

some time. It was dull brown over the head and back, dull tawny on breast; white under tail-coverts, and black bill, the lower mandible lightish grey at the base.

Besides the foregoing the following young birds have been reared :—Five Brush Bronzewing Pigeons, six Diamond Doves, and six Japanese Greenfinches.

D. SETH-SMITH.

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## BRITISH BIRDS IN NEW ZEALAND.

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A highly interesting and instructive paper has reached us from New Zealand, entitled "Our Feathered Immigrants," in which the author, Mr. James Drummond, gives a digest of a mass of evidence which he has collected for and against the various species of birds that have been introduced into that country.

A circular, with twenty-nine questions relating to the introduced birds was drawn up, and issued through the Department of Agriculture to agriculturists throughout the colony. It is unnecessary here to repeat all the questions that were asked, suffice it to state that they requested information as to whether any introduced birds were present in the district of each colonist who received the circular; whether such species had done good or harm; whether they had driven away the native birds or otherwise; if proved to be harmful, what steps had been taken to check their spread, and whether the introduction of other British birds could be undertaken advantageously. The pamphlet above mentioned is the result of this inquiry and is very interesting reading.

The native fauna of New Zealand is perhaps the most interesting of that of any part of the world, but it could not exist in the face of civilization. With the introduction of three pigs, liberated by Captain Cook in Queen Charlotte Sound in 1773, the war against the native birds may be said to have commenced. These multiplied exceedingly, and when the settlers began to arrive the pigs had become a nuisance. To make matters worse the settlers brought with them many domestic animals, more disastrous than Captain Cook's pigs, and a bitter struggle

between the new fauna and the old took place. The native fauna had "no chance against the shrewd vulgar, hard-headed, cunning, practical, greedy, and ferocious invaders, who were inured to hardship and had walked hand in hand with adversity through many generations. The incident was a specially dramatic one in respect to the avifauna. The native birds were driven completely away—not altogether, or even chiefly, by the new comers, but by influences that the latter had been taught by experience to combat. Sentiment, necessity, and utility played parts in connection with the acclimatization of birds, and it was necessity and utility that carried most weight."

With the disappearance of the native birds, a terrible plague of caterpillars visited the colony some forty years ago. Farmers suddenly discovered their crops completely eaten up by these pests.

"The numbers of the insects increased with what they fed upon, and they marched from field to field in grand procession, leaving behind them the abomination of desolation."

Thus we see that out of pure necessity the settlers turned their attention to the introduction of some birds that would be likely to destroy the insect plague, and very naturally they thought of those they had known in the Old Country, with the result that many of our commonest birds were introduced.

The House Sparrow comes first on the list. Five of these birds were introduced in 1876 and others subsequently; they multiplied to a prodigious extent, and the inhabited districts soon became stocked with them. Although they are acknowledged to destroy a certain number of insects when feeding young, the good thus done is far more than outbalanced by the harm these birds do in destroying the crops. "Of the hundreds of correspondents who have filled in the circular there are only six who raise their voice in the Sparrow's favour." However, in concluding the account of *Passer domesticus* the author remarks "Whatever the Sparrow may do in these times, however, there is no doubt that it did good service to the agriculturist and horticulturist of New Zealand in former days, when the insects were on the war-path and when the people were liable to be eaten out of house and home. A new generation has arisen, and only the Sparrow's faults are remembered."



The Blackbird is universally condemned by fruit-growers and "its name linked with that of the Sparrow."

The Skylark is found to pull up spring wheat and other seedlings, and is also condemned by the colonists.

The Song Thrush is considered to do more harm than good. Though one observer is quoted who speaks very highly of its usefulness in destroying worms, slugs and insects.

"The Greenfinch is described sweepingly as the farmer's greatest enemy when grain is ripening."

The Goldfinch has not aroused much enmity and some say that it does more good than harm. The Redpoll is generally considered harmless; but "the Yellowhammer is classed with the Sparrow in descriptions of the damage done to seed in newly sown bush-burns in the North Island."

"Praise of the little Hedge-Sparrow is almost unanimous," while "there is hardly any limit to the good words said of the Starling," for which bird numbers of farmers erect nesting-boxes. Some alarming stories are told, however, of Starlings having taken to eating fruit; a habit that will not surprise those who know the bird in the Old Country.

One of the questions asked in the circular was, "Generally speaking, have the introduced birds done more good than harm, or more harm than good? The following replies are typical of the majority of those received: "As with most aliens, it would be better if they had stayed at home"; "A terrible mistake"; "For Goodness' sake don't make it worse by importing more of them," and so on. "The consensus of opinion," the author remarks "is expressed in too clear, concise, and emphatic a manner to leave any shadow of doubt as to the strong antagonism felt towards English birds.

"Many farmers, however, modify their condemnation by expressing an opinion that if the birds could be kept in check they would be converted from enemies into friends. I cannot help thinking that this is the proper attitude to adopt. The birds are far from being altogether bad. A forgetful generation may have a bad memory, but great services given in the past must not be ignored when the birds are on their trial."

It has often been stated that the introduced birds have

driven away the indigenous species, but this does not seem to be the case according to the result of the present inquiry, which has "failed to bring out any evidence of a determined or concerted plan on the part of the introduced birds to attack and drive away the native birds. Sparrows and other introduced birds have been seen attacking natives, but Tuis and several other species of native birds have attacked introduced birds on occasions with great ferocity."

## NOTICES OF NEW BOOKS, ETC.

### WILD LIFE IN AUSTRALIA.\*

Those who are interested in the fauna of Australia will find an abundant supply of interesting matter in Mr. Le Souëf's new book. The author deals with his subject in a manner that shows him to be a most observant and experienced naturalist of a type that is all too rare now-a-days. "Wild Life in Australia" is no compilation from the works of others, but a careful record of the author's own observations over a long period, of the wild life of a most interesting country.

Of the bird-life of Australia we learn much from Mr. Le Souëf's book, and many of the birds dealt with are known to us here as aviary inmates, as they are also to Mr. Le Souëf who, as Director of the Melbourne Zoological Gardens, knows most of the Australian creatures in captivity as well as wild.

It is difficult to say which chapter is the most interesting, every page is delightful, but perhaps the author's account of his visit with a companion to Albatross Island, one of the Hunter Group, off Tasmania, is especially worth mention. The island is composed entirely of rock, overgrown in parts with pig-faced weed or mesembryanthemum, wild geranium and tussock grass. While gazing from the top of the island the explorers suddenly caught sight of a number of large birds sitting on clear ground near the edge of the cliff, which proved to be *Diomedea cantu*, the Shy Albatross of Gould. Remembering that Gould had said that

\* *Wild Life in Australia*, by W. H. DUDLEY Le SOUËF, C.M.Z.S., M.B.O.U., &c., Director Zoological Gardens, Melbourne; Whitcombe and Tombs, Limited, Melbourne and London. Price 7/6 net.

these birds were very difficult to approach, "we went towards them very carefully, keeping ourselves hidden in the tussocky grass and frequently crawling along to avoid being seen. When sufficiently close we took our first photo., and we did so by slowly raising the camera to the level of the grass, all set, and then letting our shutter go from our place of concealment. We then remembered that the Albatross could not well rise from the level ground, so approaching closer with less care took another snap shot, and as the birds still did not rise, we boldly walked up to one, and found that they practically took no notice of us." Some extremely good photographs are given, illustrating the Albatross colony and the birds sitting on their nests, feeding their young and so forth.

One other extract, perhaps of more interest to aviculturists, must suffice. In the chapter headed "Mallacoota Inlet," the author writes : "In one of the gullies we heard a Lyre Bird on its slight mound, mimicking the various birds of the bush, even the Laughing Jackass, the Grey Crow Shrike, Gang-gang Cockatoo, &c. But what struck us as most curious was its imitating the whining and yelping of a puppy ; and we afterwards heard that some miners who were camped near by, used to leave a puppy fastened up at their tent while they were away. We also heard the bird uttering a note something like the sound produced by a cross-cut saw, and as one had worked in the neighbourhood, that is probably what it was ; it only shows what wonderful power of mimicry these interesting birds have.

"We frequently heard the Satin Bower Birds in the dense scrub and were fortunate in finding one of their bowers built in a pretty situation and surrounded with ferns. These birds when in their greenish costume are far from shy, but when the males don their beautiful dark blue satin livery in their seventh year, they at once seem to realise that they are conspicuous and always keep as much out of sight as possible ; but for all that they evidently soon fall a prey to the watchful Hawk, as it is a rare thing to see more than one blue male in a flock of these birds. It is curious watching their antics as they are playing round their bower, hopping about with mincing steps and drooping their wings at the same time, picking up sticks or shells and dropping them again in front of

one another, and at the same time uttering a low running note. They are also very clever at mimicking other birds."

Mr. Le Souëf is a skilful photographer, and his photos., with a few by Mr. Mattingley and others, are liberally dispersed throughout the pages of this book.

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### GILBERT WHITE, OF SELBORNE.

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The Hastings and St. Leonards' Natural History Society numbers amongst its members some of our best ornithologists, who from time to time deliver lectures to the members on various branches of their favourite science. One of the most important of these was delivered on June 4th last, by Mr. W. H. Mullins, M.A., under the title that heads this notice, and is now published by Messrs. Witherby, at the moderate price of 2/6. An interesting account of the life and work of the famous naturalist is given and is well deserving of perusal by those who follow in his footsteps. It is illustrated by several excellent photographic plates.

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### CORRESPONDENCE, NOTES, ETC.

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#### HYBRID *NEOCHMIA PHAETON* × *BATHILDA RUFICAUDA*.

SIR,—It may be of interest to record the fact that in my aviary in Italy, on the Lake of Como, a male Australian Crimson Finch, *Neochmia phaelon*, has taken to himself a female Star Finch, *Bathilda ruficauda*, to wife. Unfortunately the two young ones, which were the result of the match, were found dead whilst still in a featherless condition, thrown out of the nest.

I still hope that some young may be reared in the future, for such a hybrid would undoubtedly be most interesting. The parent birds are building again, but it is rather late in the year, and I shall not encourage them.

HUBERT D. ASTLEY.

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#### THE TRUMPETER BIRD.

SIR,—In the very interesting article on the Trumpeter Bird, by Mrs. Gregory, in the November issue of the *Avicultural Magazine*, she gives "Agami" as the native name of this bird.

May I beg to suggest that this is the native name of the Agami Heron (*Ardea agami*)? The only native name of the Trumpeter Bird which I remember to have heard in British Guiana was "Warracaba."

E. W. HARPER.

#### AVADAVATS, BLUE-BEARDED JAYS, BULBULS.

Mr. TESCHEMAKER writes:—

"I see you mention the breeding of the Common Avadavat in "Stray Notes," but surely this is not exceptional is it? I bred two young of this species in 1904, and two more in 1905.

"I should be obliged if you could tell me if the Blue-bearded Jay of South America has been bred, and also if any Bulbul has been bred except *P. hæmorrhous* which I believe, the Zoo. bred some time since.

[With regard to the Avadavats, it may not be very exceptional for them to breed in this country, but certainly it does not strike us as a particularly common occurrence. Unfortunately our members are so shy of recording such events, many apparently thinking that it is not worth recording breeding results unless the species bred has done so, for the first time in captivity. We wish all of our members would record the nesting in their aviaries, of even quite common birds.

The Blue-bearded Jay has never, we believe, bred in captivity, and the same may be said of the Bulbuls with the exception of *Pycnonotus hæmorrhous* which bred at the London Zoological Gardens in September 1900, though whether the young were reared to maturity or not we do not know.—ED.]

#### OLD BOOKS WITH NEW NAMES.

Certain publishers appear to be rather fond of issuing new editions of old works with entirely different titles to those by which such books have always been known, a practice which is calculated to mislead the public and bring blame upon the author, though he may be entirely ignorant of the publishers intention until after the book is in the hands of the public.

Many of our members possess Dr. A. G. Butler's *Foreign Fiuches in Captivity*, and if these should chance to hear of an apparently new work entitled *Beautiful Foreign Fiuches* they may be somewhat disappointed to discover that this is merely a cheap edition of the older work which, though excellent in itself, is somewhat out-of-date now.

We understand from the Author of the above work that he knew nothing of this change of title until a correspondent informed him of it.

Again, a new edition with coloured plates, has appeared of "British Birds with their nests and Eggs" under the title of "Birds of Great Britain and Ireland." In this case, however, a change of title was rendered necessary as in most of the new plates no nest has been figured. We

understand from the Author that he wrote an Introduction, in which he fully explained the necessity for the change of name, but although this was printed, corrected and approved, it has not been published in Vol. I., which therefore appears as an entirely new work, though, as a matter of fact, only the plates are new.

## SPECIAL NOTICE.

The Editor is leaving England early in December on a mission to Australia for the Zoological Society of London, and will not return until next May or June. In the meantime Dr. A. G. Butler has most kindly consented to act as Editor of the *Avicultural Magazine*, and all editorial matter should be addressed to him at 124, Beckenham Road, Beckenham, Kent.

## POST MORTEM EXAMINATIONS.

### RULES.

Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lanherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, *and a fee of 1/- for each bird*. If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons, and Canaries can only be reported on by post.

PINTAIL, NONPAREIL. (Miss Gladstone.) The bird died of concussion of the brain, caused by direct injury to the top of skull.

RED ROSELLA. (Mrs. Lee.) The bird died of syncope. It was extremely fat and the heart was loaded with fat. I think the sunflower seed too fattening if given in quantity.

SHAMA. (Mr. Norwood.) The bird died of inflammation of the bowels. He was having a very hard moult.

*Answered by Post :*

Baroness LE CLEMENT DE TANITEGNIES.

Rev. H. D. ASTLEY.

### III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

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## THE JOURNAL OF THE AVICULTURAL SOCIETY.

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(Continued on page iii. of cover.)





H. Goodchild, del.

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THE MADAGASCAR TURTLE-DOVE.  
*Turtur picturatus.*

# Avicultural Magazine,

BEING THE JOURNAL OF THE

AVICULTURAL SOCIETY.

New Series—VOL. VI.—No. 3.—All rights reserved.

JANUARY, 1908.

## THE MADAGASCAR TURTLE-DOVE.

*Turtur picturatus.*

By T. H. NEWMAN, F.Z.S.

I have adopted the name Madagascar instead of the usual one of Mauritian for this bird, as the former island besides being so much larger is possibly the only true habitat of this species. It occurs however in Reunion, Mauritius, the Seychelles and Chagos Islands, but there is some doubt as to whether it has not been introduced into these latter Islands. Edward Newton, writing on the land birds of the Seychelles Archipelago, in *Ibis*, 1867, p. 346, says, "I also shot a young *Turtur picturatus*, and saw another. This bird is called 'Pigeon,' or 'Tourterelle rouge,' and was introduced, it is said, some few years ago by a late Inspector of Police. It is not very common, and I saw it nowhere else." On the other hand, Ridgway, in Pr. U. S. National Museum, XVIII., p.p. 512, 513 (1895), describes a female from Mahé (Seychelles), as being altogether paler than an adult male from Madagascar, and proposed to separate it under the name of *abbotti*. He adds a note that Dr. Abbot is positive that the Seychelles' bird is not an introduced species, but a native of the Islands. To which our member, Mr. J. Nicholl, naively replies in *Ibis*, 1906, p. 707, "I did not see the so-called *Turtur abbotti* on these islands (Seychelles). Mr. Ridgway proposes to separate *T. abbotti* from *T. picturatus*, which was supposed to have been introduced, as he says that his specimen, an adult female, 'differs so decidedly in coloration from an adult male of true *T. picturatus* from Madagascar.' Surely one would expect the female to differ from the male even to a marked degree." The last remark

is borne out by my birds, as is shown below. Reichenow has more recently described a Turtle-dove from Diego Garcia (Chagos Islands), S.E. of the Seychelles as differing from the Madagascar bird by being much darker and having the crown slightly washed with vinous, he calls it *chuni*. So it would seem, even if it has been introduced it is already tending to split up into races.

This very interesting and beautiful dove forms the type of a small group of Turtle-doves confined to the Madagascarian sub-region on which Salvadori bestowed the sub-generic name of *Homopelia*. They differ very considerably both in appearance and habits from the typical Turtle-doves; at first sight they seem to lack the collar which in some form or other appears in all the Turtles, but on close inspection of the adult birds, the bases of the feathers on the back and sides of the neck will be found to be black, having the ends greyish vinous, with distinct green reflections in the newly moulted feathers. These feathers are distinctly bifurcated, though not perhaps quite so much so as in the Necklaced and Senegal groups, this fact is not mentioned in the Museum Catalogue of Pigeons, though it was so well known to Temminck that he took the trouble to give a separate figure of one of these feathers on his plate of the bird (Pl. Col. 242, 1823).

In shape this is the least graceful of any Turtle-dove that I have seen, being of a sturdy build with relatively short tail and longish legs, which points to the fact that it spends much time on the ground. I think this is quite borne out by my birds; its handsome plumage however quite deserves for it the name of "Painted," by which it is often known. The head is grey, the wings brown, with the scapular region beautifully tinged with rich vinous purple; the breast is vinous gradually fading to white on the under-tail coverts; lateral tail feathers dark gray with ashy band at the end, in my male bird the inner web of the outermost feathers on each side is almost white, but in the female it is ashy. The central tail feathers are brown. The bill is livid grey purplish on cere and on edges of gape; narrow carmine skin round eye; iris brown passing into crimson on the outer edge. The pupil is nearly round in a dull light, but contracts to a narrow oval, becoming almost a slit in bright sunlight. I have never

noticed anything like this in any other dove, I have not seen any signs of its being more crepuscular in habits than usual. Feet dull purple.

The female is easily distinguished from the male by being considerably smaller, the purple patch on the back and wings is duller and less extensive, and all her colours are less bright.

The following account of its habits is given by Milne-Edwards and Grandidier, in their great history of Madagascar, Birds, Vol. XII., p. 462. "These Turtle-doves are very common in all the Island of Madagascar, particularly in the plantations and cultivated fields, where they are found in pairs and sometimes in little bands of from six to eight individuals. Like their allies of Europe, they walk well and fly with rapidity without noise, they make quick turnings to baffle the pursuit of their enemies, their cooing is soft and monotonous. They feed on grain and make great ravages in the rice fields at the time of sowing and at the season of harvest. Their flesh is very delicate. Their nest, like that of all pigeons, is flat and roughly made of grasses and small roots, it is placed in a tree at a low elevation, their eggs are white, and measure 30 mm. by 23. The Malagasy call this Turtle-dove *Domohina*, *Lomohina* or *Dimohy*."

The Rev. J. Sibree, in *Ibis*, 1891, p. 564, says that *Domòhina* is the general name by which it is known, while Provincial Malagasy names are *Domòy*, *Demòy*, *Lamòka*, *Dèho* and *Dèmodèmoka*.

Early this year I saw advertised some "Aldabra Doves," thinking they might be the Aldabran Turtle-dove (*Turtur aldabranus*) I sent for a pair. On arrival I saw that they could not be this species on account of their grey heads, and they turned out to be the nearly allied Painted Dove, the subject of this paper. For some time I feared that I had not got a true pair, though one was larger and brighter than the other. The smaller bird soon showed itself to be a hen, and laid two eggs in March and two in April, but as the bird was at this time unmated, they were unfertile. About this time I felt sure that the other bird was a cock, as it began to coo a good deal to other doves, but would take no notice of the hen. From the first they made themselves quite at home, always I think roosting in the inner

house, each in its own particular spot. The notes of this bird are quite distinct and differ much from those of any other dove that I know, both birds very frequently utter a hoarse nasal sort of grunt, *Hē-hē-hē*, when alighting or fighting another bird; when on the ground they often draw in their heads and run at another bird uttering this note; but they do not seem at all quarrelsome as doves go. The coo proper is very different, the cock draws himself stiffly up before beginning to coo to another bird and making a very low bow utters his *cōō-cō-ō-ō*, the last part very much drawn out, this note is low and of considerable sweetness, so very different from the ordinary irritable grunt.

Although the birds were together from January, they did not mate until August, when I was quite surprised to notice that they were getting friendly.

Their first egg was laid on August 15th, the second probably on the 17th, and a day or two afterwards I found the eggs deserted, as they had chosen for their nest a zinc bowl in the corner of the inner house of their aviary and the nesting materials had slipped so that the eggs had got underneath, as a last resource I put the eggs, which were of course cold, under another pair of doves just as I was leaving home, not expecting any result, when I returned a fortnight later, both eggs had hatched, but one young had disappeared, and the other which was about four or five days old was lying in the nest cold and almost dead; I warmed it up and gave it to a kind-hearted old Pigeon × Dove hybrid who is now over thirteen years old, and his white Barbary wife. They never have had any children of their own but make most excellent foster parents; although they had only been sitting a few days, they welcomed the little stranger gladly and brought it up splendidly. So this is how probably the first *Turtur picturatus* was reared in this country.

In the mean time the old birds had built another nest in the same place, this time using quite stout sticks and twigs, making a good substantial nest, which was evidently quite satisfactory as the two eggs which I found in it on the 1st of September, both hatched and the young were successfully reared by their parents. I am unable to say exactly how long incuba-



tion lasted, as the young of the first nest were hatched and the eggs of the second laid when I was away, but I expect about fourteen days, perhaps a day or two less was the time.

The eggs seem to be remarkably large for the size of the bird, they are larger than those of the Half-collared Turtle-dove (*Turtur semitorquatus*), the largest being hardly inferior to an egg of *Columba rufina*, a bird to which this Turtle-dove bears quite a strong resemblance in general colouration. The eggs are of course white and moderately glossy, I have the four first preserved. The two laid in March are quite different in shape, the smaller one is a blunt oval not much more pointed at the smaller than at the larger end, this may probably be the first egg ever laid by the hen, as the fellow egg and both those laid in April are larger and taper off to a quite remarkable point at the smaller end, giving them the shape of a short fat torpedo.

The young are hatched well covered with bright yellow down, almost reddish fawn on head back and outer edges of wings, bill flesh-coloured with an almost black band near the tip, extreme tip yellowish flesh, feet and claws flesh-coloured.

The first plumage is very different from the adult bird. I fail to notice the "greenish" tinge mentioned by Milne-Edwards and Grandidier and quoted in the Museum Catalogue. The vinous purple of the adult is only foreshadowed by a vinous tinge at the base of the neck and on the interscapular region, while the whole of the smaller feathers on the outer aspect of the wings are dark gray broadly edged with bright chestnut, the quills have their tips and outer edges also outlined with chestnut; the under surface is ashy with each feather washed with chestnut, the feathers on the neck lack the dark bases and are not notched, the bill is duller than the adult, being brownish gray with dark tip, feet grey with pinkish tinge, the scales purplish brown. The chestnut ends of the median and greater coverts form two quite distinct bars across the wing, when the wing is spread out a narrow, almost black band is seen across the end of each greater wing-covert, the extreme tips are again chestnut.

The eldest young one, about eight weeks old, has got many purple feathers on the shoulders and has renewed nearly three of its primaries, all the chestnut ends of its feathers have much faded.

The half-grown young in the nest has a curious appearance when it fluffs out its feathers and snaps as all young pigeons do, the dark bases of the feathers make a background for the chestnut coloured tips which then stand out very noticeably, it looks like a black bird covered with chestnut spots.

The old birds proved to be very devoted parents: when the young were three or four days old I noticed the cock bird fighting the hen who was sitting, I think he wanted to sit on the young and the hen would not let him, I feared the young would come off badly in the dispute, but in a day or two matters seemed to be arranged and things went smoothly. The hen would sit closely when I examined the nest hitting out fiercely with her wings. When forced to fly off she would as it were fall out through the door into the flight, dropping on the ground, she would flap her wings and struggle along the ground as if she had lost the use of her legs, if I followed her she would continue this until she nearly reached the end of the aviary, then she would fly up quite recovered, this pretended injury I thought rather interesting in a captive pigeon, though I believe it is not unusual in the *Columbæ*.

Three specimens of this dove seem to have reached our Zoological Gardens in the sixties, since which I think it has been unrepresented.

---

## THE FEEDING OF LORIES.

By E. J. BROOK.

I offer this paper to the Editor of the *Avicultural Magazine* in the hopes that, if there is any value in it, it may help those who keep the Brush-tongued Parrots in their aviaries to keep them in better health and give these most interesting birds a long and merry life.

My aviaries contain some ten distinct species of Lories and Lorikeets and about twenty individual birds, all representing the least known kinds. I have never been satisfied that the feeding these birds have had was quite satisfactory, though prepared carefully and according to the best advice obtainable. The powdered plain biscuit with boiled milk and sweet fruit was

fairly good, but now and then I would see a bird blinking its eyes and looking as though it had a sore head, symptoms that more often than not were quickly relieved by a few drops of magnesia, but then there were the few cases where relief did not come but death did, and that swiftly.

I was fortunate enough to interest my medical adviser in my birds, and on pointing out to him my difficulty as a non-scientific man in finding out the real cause of illness, he kindly offered his assistance and advice. We found in the case of a Violet-necked Lory that died that the stomach was full of milk curd and very acid; this seemed to confirm what I had long supposed to be the case, that indigestion was the cause of most of the deaths among the Lories.

The next step was to examine carefully the excreta of all the birds, and the same conditions prevailed in a greater or less degree in every aviary, viz., the contents of the bowels was alkali and contained some specks of undigested milk curd which was very acid. It will be easily seen that a very slight derangement would cause the stomach to become dangerously acid and so cause illness or death.

The next move was to find some food that would not turn acid on the stomach, and at the first trial we hit on what looks like the right thing, viz.: one of the predigested foods, in this case Mellins food for infants is used. My doctor instructed my aviary attendant to give some of the Lories their evening and morning meal of milk, with Mellins' in place of biscuit. He then made a careful examination of the excreta and the result of the analysis proved that the digestion was quite normal and that all bad symptoms had disappeared. A little further trial showed the amount of the patent food necessary with the boiled milk, and the result is, that though the bottle of liquid magnesia is still on its shelf it is very rarely if ever used, and the birds all look in the very best of health with none of the puffiness so often seen after feeding.

One fruit we found it advisable to discard from the Lories aviaries, and that was oranges; bananas we use sparingly, but grapes and soaked sultanas *ad lib.* Canary seed is not withheld from those that care for it.

I ought to mention that I do not use Mellins' food as a staple article of diet but only as a corrective. My staple food is the usual milk sop made with powdered plain biscuit and fresh milk diluted with about half its own bulk of water and slightly sweetened. The Mellins is substituted for the biscuit and sugar when there is any appearance of acidity or indigestion, and is continued for three days. I have also tried peptonising the milk with Fairchild's Peptonising powders with great benefit to the birds, and I believe this treatment of the milk would help many a Lory that was not thriving.

All this sounds like giving a lot of trouble, but it is worth a little trouble to have a healthy bird, and the trouble is not as great as it looks.

---

## THE WHITE-EYED DUCK.

*Nyroca ferruginea.*

By GORDON DALGLIESH.

The White-eyed Duck or Pochard is the smallest member of the family of diving ducks. My own acquaintance with this Pochard was made in Bengal, where it is exceedingly plentiful during winter, and forms the greater part of a bag made in a day's duck shooting there. Charming little reed fringed pools on marshes covered with water lilies, and deep broads where there are plenty of weeds below the surface are the favourite haunts of the White-eye. During the day, when the sun is well up, it keeps to the shelter of the rushes, feeding little and sleeping a lot. Very often one sees it searching among water lily leaves, apparently feeding on small molluscs found there. It keeps very much to itself, not mixing with other ducks, and in parties of fives and sixes, and again in small flocks numbering from twenty to thirty individuals. I have never found it a shy bird, and one is pretty certain of bagging a few from every flock that one comes across. When flushed it rises somewhat awkwardly off the water accompanied with a good deal of whirring, and when well on the wing the flight is extremely swift. As an article of diet I can thoroughly recommend the White-Eye. Personally I have never found them fishy or rank, though it

would appear from the writings of other observers that their experience has been quite the reverse. Out of water it has an ungainly, one might almost say ludicrous, appearance owing to its small round body and large flat feet, and if hurried tries to run, this ending in its tripping and stumbling. It bears captivity well, and in quite a small space I kept a number in company with Tufted Ducks (*Nyroca fuligula*) and they got very tame indeed, and would almost feed out of my hand. These Pochards were caught in November 1900, and up to the end of July the males showed no signs of changing their plumage. The note of the White-eye is a harsh *kurr* uttered chiefly when rising off the water. My captive specimens at times uttered a curious low sound quite impossible to describe, but soft and not unpleasing to the ear. The food of the White-eye in a state of nature is omnivorous, feeding on grain, molluscs and small fish.

The range of this duck is given as the Mediterranean area, Central and Eastern Europe and S. Western Asia, a rare straggler to Great Britain. It breeds abundantly on the lakes of Cashmere and numbers of its eggs are brought into the markets there and sold for food.

The adult male has the head, neck and breast a rich rufous. There is a white spot on the chin and a blackish brown collar round the lower neck. The general tone of the upper plumage is brownish, the back and the scapulars are minutely speckled with a deeper brown; tail, brown; the speculum is white, upper abdomen white, lower brownish; under tail coverts white.

The female is much duller, and the brown on the breast is mixed with white. The bill is a bluish black; legs and feet plumbeous; the webs black. Length of male about 16 inches. The female is slightly smaller. It is only the fully adult males that exhibit the characteristic white iris, those of the immature birds and females being brown. The curious phenomenon of Pochard's eyes changing colour is, I believe, not uncommon. This occurred in a specimen of a male Pochard (*N. ferini*) I shot, which was only slightly wounded, and whilst giving it the *coup de grâce* I distinctly saw the blood red iris change to pale yellow.

The nestlings of the White-eye are most beautiful little creatures. The top of the head is brown mixed with yellowish

hairs; back brown mixed with a good deal of yellow; sides of the face, throat, and upper abdomen golden yellow; lower abdomen brown mixed with grey; sides of body a golden brown. The above description is from a specimen in my possession taken in Hungary.

The eggs of the White-eye are drab with a faint greenish tinge and a long oval in shape, and measure about 1'9" to 2'2'.

---

## SPERMOPHILA AS A POTENTIAL WEAVER.

By A. G. BUTLER, Ph.D.

On the 28th of last month Mr. E. W. Harper very kindly sent me three of the rarer species of *Spermophila* (or *Sporophila* as Ridgway calls it, the name *Spermophila* not being synonymous with *Spermophilus* of Cuvier) viz., *S. castaneiventris*, *S. minuta*, and *S. ocellata*, all of which are well figured by Goodchild on a plate in Vol. VI. of *Bird Notes*.

Of the wild life of the first of these—the so-called Lavender-backed Finch, nothing appears to have been published, so far as I can discover. The second—The Fire-red Finch, builds its nest of coarse grass, in bushes, and lays white eggs spotted with several shades of rich red-brown: it is a near relative of the Reddish Finch (*S. nigro-aurantia*), of which I had a specimen for a good many years. The third—Ocellated, or Black-headed Lined Finch (*S. ocellata*), is another species of which we should like to know the wild life, for even respecting its near relative the Lined Finch (*S. lineola*) we are only told that it affects the outskirts of woods: it is a charming singer and should, I imagine, have somewhat similar habits to other pied species with very similar vocal acquirements—such as *S. albigularis* and *S. cerulescens*, not that the latter is much of a songster, though a near relative of the White-throated Finch.

The receipt of these three charming little birds again turned my attention to a question which had engrossed it previously and respecting which I will offer a few suggestions;—not so much for the consideration of the systematist, who is tied hand and foot, and feels compelled to follow the guidance of slight

structural modifications of beak, foot, and wing, in his search after the relationships of genera, but rather for those who consider that the habits of a bird may offer a surer indication of its affinities than the outline of beak, length and proportions of tarsus or claws, of wing or tail, (all of which doubtless are modified by the habits). Without a perfect knowledge of the internal anatomy, I do not see how anyone can state authoritatively that any external character is inherited and not an adaptation to the *modus vivendi*.

In the twelfth volume of the "Catalogue of Birds" Dr. Sharpe places *Spermophila* near the end of the Grosbeaks (*Coccothraustinæ*) and near to *Melopyrrha* and *Phoniopara*, but in his introductory notes to the *Fringillidæ* he expresses the opinion that "*Phoniopara* and *Volatinia* are probably Buntings."

Ridgway (Birds of North and Middle America) appears to me to regard the three Sub-families of Sharpe's classification as purely artificial, and their exponent admitted that they were so; and owning his own inability to define these sub-families, he enumerates certain genera in which the young are streaked and others in which they are not, rejects four genera as not fitting into any of the groups susceptible to more or less exact definition, and concludes with an admission that his key to the genera is to a large extent artificial.

The classification of any group of animals by external characters alone must always be to a great extent artificial. A natural classification must be based not only on the internal as well as external structure, but also upon the habits of the living creatures. I note that Ridgway does not ignore this fact, although he puts habits last: I should be inclined to regard them (within certain limits) as of greater importance than external structure, especially where they deal with nidification.

The form in which a bird habitually builds its nest must have been the result of a habit slowly acquired through many long forgotten generations of ancestors; therefore the structure, especially of complex nests, seems to me a good guide, within reasonable limits, to relationship. I should not, of course, regard *Phylloscopus* as related to *Munia* because there is a similarity in the general character of their nests; but where, among the

finches generally, there was a resemblance in nidification and other habits, I should conclude that there was some relationship.

Ridgway calls *Sporophila* a genus of Seed-eaters; and I see no objection to this, because the Old World Seed-eaters, like the New World *Spermophilæ*, are mostly excellent songsters; and some of them have broad heavy beaks not unlike that of *Chloris*: both genera, *Serinus* and *Spermophila*, build open cup-shaped nests, and in captivity can be induced to build in nesting-boxes or cups; but in the case of some of the *Spermophilæ* the nests are not formed in the mechanical fashion adopted by most of the cup-building finches, but are laboriously netted into the most delicate and artistic tracery of a cup, the materials used being the finest and toughest fibre, rootlets, or horsehair. *S. albigularis* some years ago built several of these pretty structures in my birdroom, using the fine white fibre sometimes used for filling grates in the summer time: they were light as gossamer, but utterly untearable by human hands.\*

Now it seems to me that when certain birds in a genus exhibit a talent for weaving far in advance of other cup-building finches, we see the first steps towards the development of the marvellous structures produced by the Weavers.

In *Melopyrrha* and *Phonipara* (the second of which Ridgway calls *Euetheia*—a change which I consider quite unnecessary, since both genera were described in the same year and the construction of *Euetheia* needed later emendation) the nest is formed precisely in the same manner as in the Viduine *Ploceidæ*—*Muniinæ* and *Estrildinæ*, and therefore some time since I proposed for these clever architects the Subfamily name of *Phoniparinæ*.

Ridgway says that *Melopyrrha* "is an exaggeration of *Sporophila*, but between the most similar species of the latter and the type of *Melopyrrha* there is a considerable gap." This is just what one would expect where, though both birds weave their nests, the finished structures so greatly differ.

Ridgway calls the species of *Melopyrrha* "Bullfinches," though no Bullfinch ever built a nest of the Ploceine pattern; the species of *Phonipara* he calls "Grassquits," a name applied

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\* *S. caeruleus* does the same and probably others of the pied species.



to the genus in Jamaica, but the meaning of which is not evident.

I see no reason why *Spermophila*, *Melopyrrha*, *Phoni-para*, and perhaps *Passer*, should not be the modified offspring of the extinct types from which the *Ploceidæ* were evolved. The nine- or ten-primary distinction is of no great moment, since it is generally admitted now, that in the so-called "Nine-primaried Oscines" the tenth is "always present, but rudimentary and quite concealed" (*Ridgway*), and I would go farther and say that in *Passer* and some other genera of the *Fringillidæ*, and all the *Icteridæ* which I have examined, the tenth primary is better developed and less rudimentary than in many genera of *Ploceidæ*, though concealed by its coverts; so that the relative length of the coverts, which varies in different genera, is the only distinction between nine-primaried and ten-primaried Oscines.

Formerly I rejected *Passer* as a probable relation of *Phoni-para* because I only knew of species which, like our British Sparrows, constructed, at best, purse-shaped nests open close to the top or at the top; but Stark tells us of *Passer arcuatus*: "occasionally I have seen a bush so packed with nests that they formed a solid mass much like one of the collective nests of a Social Weaver-bird." He furthermore observes:—"The nest, a domed structure, is more or less flask-shaped, with an entrance from a few inches to more than a foot in length, through a horizontally projecting neck. This is essentially characteristic of the *Ploceidæ*."

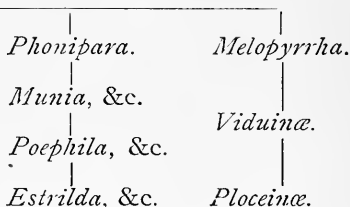
It seems to me probable that *Munia* and allied genera which still produce species strongly reminiscent of *Spermophila*, is the oldest type of the *Ploceidæ* and that from this the more gaudy Grass-finches, somewhat recalling the colouring of *Phoni-para* and many of them with similar whispered songs, have sprung; finally developing into the more slender and alert shrill-voiced *Estrildinæ* or Waxbills. Whether the true *Viduinæ* also branched off from *Munia* or at an earlier age from *Melopyrrha* is of little matter, since all family-trees whether based upon structure or habits must necessarily be conjectural, however dogmatically an author may lay down the law.

The Mannikins and Grass-finches, which may be represented roughly by *Munia* and *Poephila* (*Muniinæ*) are practically

one group, stoutish, more or less heavy-looking and broad-billed birds which, when singing, always depress their heads, open the beak wide (unless holding a straw in it); and, with few exceptions, utter barely audible songs. The Waxbills (*Estrildinæ*) are usually more slender, with narrower more conical beaks; which (when the bird sings to his mate) are directed straight upwards towards the sky; even if the bird is almost destitute of song its notes are clear. In plumage many of the Waxbills reproduce the general colouring of certain Grass-finches.

Phylogeny suggested by habits.

*Spermophila.*



Very likely this is all nonsense, like most phylogenetic schemes for accounting for what we are all profoundly ignorant of, but it will at least serve to indicate the groups of weaving Finches, and call attention to certain interesting similarities of plumage which seem to indicate relationship.

## THE COMMON ACCENTOR.

(*Accentor modularis*).

By W. E. TESCHEMAKER.

I have often wondered why so very few of our Society's Medals have been awarded for breeding British Birds. In the November number may be found a list of thirty-five medals and only two of these relate to British species and of these two, one (the Pine Grosbeak) is but very seldom seen in this country. Is it that our English birds are harder to breed or that, on the *omne ignotum pro magnifico* principle, we regard foreigners as more desirable? I notice with regret that some modern works on aviculture have laid it down as a kind of axiom that foreign birds in a state of captivity are tamer and more interesting than British species.

Of course everyone is entitled to his opinion and personally I am absolutely opposed to this dogma. I believe no Shama or Dhyal can by any possibility be more thoroughly tamed than our Nightingale, Redstart, Whinchat, or Pipits; and there is more character, more individuality in a Nuthatch or a Bearded Tit than in all the Mannikins that were ever imported into this country.

So, in defence of my own view of this matter, I will endeavour to say something about the very commonest of all our English insectivorous birds—the Accentor. I will not insult the subject of the present notice by calling him a Hedgesparrow and, besides, this would be a vulgar error, for he is no relation to the Sparrow family. No! He is *Accentor*—the singer, *modularis*—with the tuneful voice, much admired by Bechstein, although the latter did not consider he deserved to be called the “Winter Nightingale.”

Rather more than twelve months since, I wrote to our Editor to ascertain whether the Accentor had been bred or not, and for this purpose a query was inserted in the Magazine. However, this enquiry produced no response nor have I been able to gather any information elsewhere so that I trust that this brief narrative, should it fail in achieving any other result, will at all events settle this question.

I caught some Accentors in 1904—two males and one female—in my garden and incarcerated them in a small out-door aviary. These three Accentors, with one bred in 1906 and another in 1907 are still in my possession, and this brings me to my first postulate, viz., *that the Accentor's is an excellent life for an Insurance Company*, which certainly cannot be said for the majority of imported species.

I had some eggs laid on the ground in 1904, and a nest built (but no eggs) in 1905.

In 1906 I caught up one male and female and removed them to a larger aviary. Throughout the winter the male sang charmingly, which introduces my second postulate, viz., *that the Accentor sings when other birds are silent*.

I recently read an amusing article by Mr. E. Kay Robinson, in the *Daily Mail*, on the “winter song of birds,” contending,

*inter alia*, that the cause of the song of the Accentor was the defence of its roosting places. I must confess that Mr. E. Kay Robinson's views on bird-life are too profound for me ; in fact they represent to me a series of problems more elusive than those they claim to elucidate. I sing, myself, occasionally. Do I sing because I fear someone may appropriate my roosting place? Certainly not, but because the mood takes me. In the same way the song of the Accentor appears to me to be an expression of himself and, if he sings in the winter it is because he takes a cheerful view of life and, with his sound digestion, can keep himself in excellent trim when other birds are starving. We must recollect, in this connection, that the Accentor will sing in a cage far removed from others of his race and further, when in deference to a barbarous custom—now-a-days, I am glad to say, rare—his sight has been destroyed.

Before leaving the subject, let us note how sensitive and modest is the singer—the true artistic temperament!" He sings a few bars and then pauses. If you show by your sympathetic demeanour that you appreciate his effort he will sing to you again and yet again. But, if you interrupt him, instantly he slips away into covert and is seen no more.

It is quite true that the Accentor sings when he is compelled to settle any little difference with his neighbours—but his song militant is not the same. Note also how these combats are conducted. There is much shuffling of wings, much vituperation, perhaps a few feathers floating on the breeze—but no bloodshed. After it is all over the combatants depart both carolling gaily and both apparently equally pleased—in fact we might describe these engagements, in the words of the immortal Mr. Jorrocks, as "the image of war with one-sixth part of its risk." They always remind me of those early Greek battles,\* as narrated by the venerable Thucydides, whereafter both sides used to retire and set up a trophy of victory.

My third postulate will therefore be *that the Accentor is the most modest and sensible of birds.*

At the end of March my Accentors commenced to build in a small cupressus, and a pair of Chingolo Song Sparrows at the same time selected the adjoining shrub. With some difficulty I

enclosed this corner with some herring netting and managed to drive the two pairs of birds inside this enclosure.

The Chingolos deserted their nest at once, and I rather thought the Accentors had done likewise, so exceedingly shy were they in their nesting operations. However, on examining the nest after a fortnight's interval I found one vigorous youngster. I supplied plenty of live insect food, and one day I succeeded by chance in seeing the hen administer a maggot. She stood on the edge of the nest facing the youngster; the latter opened his beak and his mother with one swift peck, so dexterous that the eye could not follow it, popped the maggot far down his throat.

A singular characteristic of this species, and one that I have never seen mentioned, is that it has a tendency to become bald on the crown. Every summer until the present year all my Accentors have become quite bald for about a month or more before the moult commenced. In that quaint little weekly, the "Country Side," which I at one time used to read, a heterogeneous series of questions used to be asked on all sorts of matters pertaining to popular natural history, and to these questions the long-suffering Editor never failed to furnish a reply which, though not perhaps always quite convincing, was invariably most ingenious. But one day there appeared a question which apparently baffled the ingenuity even of Mr. E. Kay Robinson. It ran somewhat as follows:—

*Qu.* Can you tell me why our old cock Blackbird has suddenly become bald?

*Ans.* I cannot suggest any cause for the occurrence.

I feel that, where the Editor of the "Country Side" has failed, it is not fitting for a humble member of the Avicultural Society even to attempt a solution; but, if I were to hazard a conjecture, it would be that the cause has some connection with the humidity of the atmosphere. As I said above, in 1904, 1905 and 1906 all my Accentors became bald towards the end of the summer—even the young bird bred in the latter year; but this season, which as we all know has been phenomenally wet, none have lost any feathers until the moult. Similarly a Virginian Cardinal which I used to keep in the house always became bald in the hot

months but, after being turned into an out-door aviary, he never was afflicted in this way. Of course a wet summer may mean more insect food, and in this way its influence may be only indirect.

Bechstein mentions the fact that, when kept in a room with a stove, the feathers fall off from round the eyes and a kind of scurvy is set up.

Towards the end of last August my Accentors, tempted no doubt by a short spell of warm weather, again nested and again reared one youngster.

I will conclude by again asking if any one can tell us whether the Accentor has been bred in captivity.

Personally I think there is every probability that it has been bred, but it is singular how little success aviarists seem to have had with English insectivorous birds. The list of insectivorous species bred, so far as my knowledge goes, is somewhat as follows :—Three Waders (Ruff, Redshank, and Avocet), one Rail, two Wagtails, one Pipit, one Shrike, the Nightingale, Thrush and Blackbird. No Tits, no Warblers, no Chats, no Buntings. Doubtless the Robin and Starling have been bred, though I do not personally know of instances.

It would be very interesting if our members would add to the above meagre list from their wider knowledge of the subject.

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## NESTING NOTES FOR 1907.

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I enclose my nesting notes for the past year, viz. :—

Four Redrump Parrakeets, two White-eared Coures, three Rock Peplar Parrakeets, five Red Rosella Parrakeets, one Crimson-Wing Parrakeet. The Crimson-Wing was hatched and reared by a Rock Peplar.

E. J. BROOK.

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## CROWNED HORNBILL.\*

*Lophoceros melanoleucus.*

The Black and White Toucans seem to be very common in Natal, S. Africa. They fly with a light undulating movement, and perch conspicuously in the low bush trees of the coast.

I have frequently seen pairs of them, and sometimes as many together as five or eight. They are not quite so numerous up country as on the coast, but may be seen among the trees on the farmsteads, and being of a bold disposition, not unfrequently



From Stark & Selater's Birds of S. Africa, vol. III, p. 110.

(By courtesy of the Publishers).

fly down and feed among the fowls. Some farmers accuse them of carrying away young chickens and stealing eggs, but I have never heard of them being caught in the act, and so think it is a libel; the thieves and murderers being most likely the White-necked Crows.

ALICE HUTCHINSON.

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\* This, I think, must be the species intended, although (in a sketch which accompanied this note) the bills are represented as black and not carinated; but then this is the bird known as the "Toucan" of the Colonists. It lives upon insects and fruit, devouring (Stark tells us) a good many bananas and tomatoes.—Ed. pro. tem. A. G. B.

## NOTICES OF NEW BOOKS, ETC.

## HOME-LIFE OF MARSH-BIRDS.\*

Those who are fond of the birds which inhabit the marsh-lands and river-sides of our country cannot fail to be charmed with the little book which has just appeared, written by two field-naturalists, who have spent many long days with their subjects, and produced many very excellent photographs of them in their natural surroundings. No picture can be more accurate, and therefore valuable to the student of nature, than those produced by the camera, and the writer of this notice has seen few bird-photographs more pleasing than those reproduced in *Home-Life of Marsh-birds*, which bear evidence of the great patience and perseverance of the authors.

In the seven chapters Miss Turner deals with "Great-crested Grebes and Coots," "The Water Rail," "Bearded-Tits" and "Three Marsh-land Warblers"; while Mr. Bahr treats of "The Snipe," "The Red-throated Diver" and "A Nesting Colony of Black-headed Gulls." In the latter an account is given of the rearing of some Gull chicks, which will especially appeal to aviculturists.

There are no less than thirty-two photographic plates, as well as several text illustrations. D. S-S.

## BRITISH BIRDS.

The December number of *British Birds* has, as a frontispiece, a portrait of the late Mr. Howard Saunders, of whom a Memoir is also contributed by his friend Mr. Abel Chapman. Mr. P. H. Bahr publishes some interesting notes on the breeding-habits of the Red-necked Phalarope, illustrated by sketches and a photograph by the author. Dr. Hartert writes on "Birds represented in the British Isles by peculiar forms," from which it appears that there are no less than twenty-two forms peculiar to this country, though most of these differ very slightly from their Continental representatives. Dr. N. F. Ticehurst records the

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\* *Home-Life of Marsh-Birds, Photographed and Described*, by EMMA L. TURNER, F.L.S. and P. H. BAHR, B.A., M.B.O.U. London: WITHERBY & Co., 326, High Holborn. Price 2/6 net.



occurrence of the Semi-palmated Sandpiper (*Ereunetes pusillus*) in Kent, the first record of this American species in Europe. A batch of interesting notes and some reviews complete an excellent number.

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THE BIRDS OF TIERRA DEL FUEGO. By RICHARD CRAWSHAY, Captain, Reserve of Officers: late Immiskilling Dragoons. London, BERNARD QUARITCH, 1907. pp. 158 and pp. XL. of Preface, Introduction and Index. 21 col. plates and 22 photographic plates of landscapes, one woodcut and coloured map.

In the dearth of books in which the habits of South American birds have been recorded, each one that appears is a boon to the Aviculturist; and, however poor he may be, he is immediately anxious to add it to his library.

In Taczanowski's three volumes upon the Birds of Peru, only here and there do we come across a short paragraph by Stolzmann, which tells us anything respecting the wild life of the species of that country.

On the other hand, in the "Argentine Ornithology" by Messrs. Sclater and Hudson, the accounts of the wild life are as complete as Mr. Hudson was able to make them, and therefore are full of interest. In Burmeister's old work on the Birds of Brazil we also find much information.

Mr. Crawshaw has always been an enthusiastic naturalist: in the old days when he was a great collector of East African Insects, I considered him the very prince of collectors; he never neglected to record, not only the habits of the species which he captured, but the character of the country, of the climate and of the plants which prevailed.

As he was then, so he is now; his work is always excellent; what he does not know from personal experience he collates from the writings of other Naturalists; and thus we, who (in our search after records of the wild life of our captive friends) might have to wade through many scattered volumes, are saved considerable labour.

It is true that this handsome volume is very expensive and thus only the rich, or the strenuous workers among our members, can be expected to purchase it; but there is comfort in the

thought that the edition is limited to 300 copies, and therefore, with the passage of time, the value of the book will increase.

A. G. B.

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GEOGRAPHIC VARIATION IN BIRDS WITH ESPECIAL REFERENCE TO THE EFFECTS OF HUMIDITY, by C. WILLIAM BEEBE, Curator of Birds, pp. 1—41 with five plates (figs. 1—6) from Scientific Contributions of the New York Zoological Society.

This is a most interesting and instructive paper tending to show that moisture has a deepening and intensifying effect upon the colouring of animals—a truth which, if I remember rightly, the experiments of Mr. Merrifield some years since with various British species of Geometrid Moths appeared also to support.

In Part I of his paper Mr. Beebe quotes from various authorities to show what different views they hold respecting the action of climatic and environmental conditions upon colouring, sometimes correlated with a difference of size. With regard to the seasonal dimorphism of various Lepidopterous insects referred to in this chapter, I have argued (Proc. Zool. Soc. 1904, vol. II., pp. 142—4) that, inasmuch as wet, dry, and intermediate phases of a species occur and interbreed at the same season in some very dry climates, it is probable that they existed originally as simple variations; and were adapted, through elimination of the unfit, to the seasons or climates to which they had gradually migrated. This view is, moreover, strengthened by the known fact that the wet and dry phases of *Catopsilia* (*C. pomona* and *C. crocale* with their intergrades) occur and interbreed at all seasons in India, the differences between them being of no value for protective purposes. Thus, although experiment may affect the pigmentation, it only reproduces variations originally unaffected by the climate in which they lived.

Part II., dealing with dichromatism, is a chapter of considerable interest, and particularly that portion of it which treats of *Chen hyperboreus* and *C. carulescens*; but those who wish to comprehend the changes of colour in birds must read the article for themselves. While studying it I wondered if the little Wax-bill *Sporæginthus melpodus* had really acquired a female with “no

orange on side of head" as stated by Cory (cf. Ridgway, "Birds of North and Middle America," vol. IV., p. 288) owing to its introduction into Porto Rico. I have seen hundreds of African females, but in every one the orange patch was present, though slightly less intense than in the males. Shelley recognises no difference whatever.

Part III.—on Sporadic Melanism, is for the most part a record of the opinions of various aviculturists respecting melanism as observed in cage-birds, and is illustrated by our Editor's charming plate of *Munia castaneithorax* and *M. flaviprymna* with intergrades.

Parts IV. and V. are perhaps the most fascinating of all the chapters, but unhappily I cannot afford space to review them in detail. They show the marvellous effects produced upon three species of American birds by subjecting them to a moist atmosphere: the changes from light to dark plumage are admirably shown by photographs.

In *Scardafella inca*, after three months in a superhumid atmosphere, the plumage was far more heavily variegated with black than in typical wild *S. ridgwayi*. But I must not further prolong this notice, but would once more strongly recommend all those interested in evolution to get it and read it thoughtfully.

A. G. BUTLER.

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NOTES ON THE BIRDS OF KENT, by R. J. BALSTON, D.L., &c.; Rev. C. W. SHEPHERD, M.A., &c., and F. BARTLETT, F.Z.S. With nine plates and a map; 465 pp. (R. H. PORTER, 1907).

While various more or less incomplete general works are appearing from time to time upon the Birds of the British Islands, it is refreshing to come across a really careful collation and review of what has been published respecting the avifauna of a single county, by three fully competent ornithologists.

Even to those who are more or less familiar with the birds of Kent, it is a surprise to discover how rich in bird-life this county is, and how many species have been recorded as breeding therein. It was news to me that the Redwing had even been reported to breed in Kent, and still more that the statement had been confirmed by a writer to the *Zoologist*: but when one man

is searching for facts of this kind, he is not unlikely to overlook them, and thus it is of considerable advantage for a book to be produced by more than one author.

In the work under consideration the notices of accidental visitors to the county are admirably complete; and, although it is highly probable, in the present days, when aviculturists are legion and many foreign birds are constantly being imported both by dealers and enthusiastic students of bird-life, that not a few of these birds have reached our shores by the help of man; it nevertheless opens the door to adverse criticism if they are ignored.

One or two points in the book perhaps call for a word or two of comment: I am not satisfied that the Cirl Bunting is so rare as generally supposed in North Kent. In the years during which I nested there, I rarely missed seeing and hearing this bird every spring. It was most in evidence in a rough bit of scrub, probably the remains of a copse, at the side of a broad rough cart-road between two fields at Iwade. It was here I took my first nest of the species; subsequently I found two at Tunstall in 1884, and one at Friinstead in 1888.

When out birdsnesting with the late Dr. John Grayling in the Stockbury Valley he called my attention to a Great Grey Shrike flying outside a wood; and subsequently when with the same enthusiastic bird-lover near Dover we again saw this handsome species. This will add to the number of its appearances in Kent.

To all who are interested in our native birds I can strongly recommend this book, as being thoroughly up to date and reliable. The photogravure of a Woodcock on its nest is admirable, and the coloured plates are in Mr. Smit's best style. This artist certainly does not fall into the common error of making his birds unnaturally fat and woolly; if anything his White-spotted Blue-throat is a trifle too thin, but the work of no artist is quite of uniform excellence. There is a useful map of the county at the end of the volume.

A. G. B.

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ORNAMENTAL, WATERFOWL: A practical Manual of the Acclimatization of the Swimming Birds, with references to two hundred species. By HON. ROSE HUBBARD. 2nd edition, revised, corrected, and enlarged up to date. The Walsall Press, W. H. ROBINSON; and SIMPKIN, MARSHALL & Co., Ltd.

It is with great pleasure that we welcome this new edition of what has generally been acknowledged to be a most useful book, and one which nobody who is interested in Waterfowl can afford to do without.

Part I of this excellent Manual is divided into six chapters which deal exhaustively with the Management, Food, Breeding, Diseases and Accidents, Pinioning, and Exhibition of Waterfowl. Part II treats of the various species and genera referable to twelve Subfamilies. Under each species, its different forms or subspecies, its habits, breeding-places, market-value, suitability for domestication, treatment in captivity, and finally, descriptions of both sexes, are given. The book is indeed a perfect *Vade-mecum* for the lover of Waterfowl. The eight characteristic black and white plates by Frohawk considerably add to the value as well as the attractiveness of this volume: and one great charm in the book is its handy size—not too large to slip into a side pocket.\*

A. G. B.

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## THE SOCIETY'S MEDAL.

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In the November number of this journal Mr. W. E. Teschemaker recorded the successful breeding of the Chingolo Song-Sparrow (*Zonotrichia pileata*) in his aviaries. As this is believed to be the first instance of the breeding of this species in the British Isles, it is proposed to award a medal. Should any member or reader know of a previous instance he is requested to communicate with the Hon. Business Secretary.

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\* I regret that, as this book arrived just after his departure for Australia, our Editor was unable to notice it personally: his experience of Waterfowl would have enabled him to appreciate it even more fully than I am able to do.—ED. *pro. tem.*

## CORRESPONDENCE, NOTES, ETC.

## THE TRUMPETER BIRD.

SIR,—I trust Mr. Harper will not think me uncourteous if I quote my authority for the name "Agami" in reference to the Trumpeter Bird. In his *Dictionary of Birds*, Prof. Newton gives as follows: "Trumpeter or Trumpet Bird," the literal rendering, in 1747, by the anonymous English translator of De la Condamine's Travels in South America—of that writer's "*Oiseau trompette*"—which he says was called "Trompetero" by the Spaniards of Magnas on the Upper Amazon, from the peculiar sound it utters. He added that it was the "Agami" of the inhabitants of Para and Cayenne (foot note, not to be confounded with the "Héron Agami" of Buffon, which is the *Ardea* "Agami" of other writers) wherein he was not wholly accurate since the birds are specifically distinct, though as they are generally united the statement may pass. But he was also wrong—as has been Barrere—in identifying the "Agami" with the "Macnagua" of Maregrave, for that is a Tinamou: and both still more wrongly accounted for the origin of the peculiar sound just mentioned, whereby Barrere was soon after led to apply to the bird the generic and vulgar names of *Psophia* and *Peltense* the former of which being unfortunately adopted by Linnæus, has ever since been used, though in 1766 and 1767 Palas shewed that the notion it conveys is erroneous. Among English writers the name Trumpeter was carried on by Pennant, Latham, and others, so as to be generally accepted, though an author may occasionally be found willing to resort to the native "Agami," "which is that almost always used by the French."

"Whitaker, in his 'Wanderings,' speaks of falling in with flocks of 200 or 300 'Warracabas,' as he calls them, in Demerara."

Of course, Mr. Harper having lived in the country knows the name this bird is called by in British Guiana, and as I am trying, through a Captain out there, to obtain a mate for my bird: I am glad to know the name "Warracaba" is generally used by the natives, as the name "Agami," which I had told him, might result in a wrong bird being sent to me.

OCTAVIA GREGORY.

SIR,—If Mr. E. W. Harper will look up the article "Trumpeter," in the *Dictionary of Birds* (p. 991), he will see that Mrs. Gregory was justified in her use of the name "Agami," while he is supported by Waterton's authority for "Warracaba," or "Waracaba." "Agami" as an equivalent of *Psophia crepitans* is to be found in most large dictionaries, in Chamber's *Encyclopædia*, and there are very few books on birds in which it does not occur. To mention three which are close at hand—in the *Royal Natural History* (iv. p. 463) it is said that "in the Common Trumpeter, or Agami, the general hue of the plumage is black"; in Mr. A. H. Evan's volume on

Birds (p. 258) in the *Cambridge Natural History*, the bird is called the Agami; and in Cassell's *Book of Birds* (iv. 94-95), which was an adaptation from Brehm, the name is used repeatedly. HENRY SCHERRER.

---

#### SWAINSON'S LORIKEETS NESTING.

SIR,—You will be interested to hear that my Swainson's Lorikeets are now sitting on two eggs. The first was laid on November 29th and the second on December the 2nd. I am hoping that this time both eggs will be hatched.

The young bird reared last year is very flourishing, but has not grown any tail feathers yet, although otherwise in very good plumage. I fancy it is a hen, for I placed it with the other old bird I had, a cock, and they are the best of friends. C. ROSA LITTLE.

---

#### ON BREEDING BULBULS.

I note that in the December No. of the Magazine Mr. Teschemaker wishes to know if any Bulbul has been bred beside *P. hæmorrhous*.

Wiener states that *P. xanthopygus* has been bred in Germany from birds exhibited by him at the Crystal Palace in 1879, but Russ does not confirm this, but tells us that Mr. Wiener purchased four examples of *P. aurigaster* in 1878: possibly this may be the species which was bred in Germany. *P. sinensis* went to nest in Dr. Russ' birdroom in 1893, but was disturbed by Porto Rico Pigeons. A female of *Olocompso jocosa* built and laid in Mr. Wiener's aviaries, but being unmated naturally failed to hatch.

This is all, so far as I know, that has been published respecting the nesting in captivity of any Bulbuls in addition to *P. hæmorrhous*.

A. G. BUTLER.

---

#### PEAT MOSS FOR BIRDS.

SIR,—I notice that in the November issue reference is made to Prepared Peat Moss, and to "Abrahams' Mixture" for soft-billed birds. A correspondent seems to be unable to obtain the former. The Liverine Compy., Grimsby, Lincolnshire, supply Peat Moss ground down to a fine condition, about the size of coffee. I find it most useful, indeed quite indispensable for covering the floors of foster mothers and cool brooders. My first batch of chickens is always due from the incubator on the 1st of January, and I continue hatching till mid-April in this way, until broody hens can be obtained in this district. I rear in foster mothers stood out in the open, and without some such perfect deodorizer, and desiccator as Peat Moss, I could never get on through the damp and cold of a Yorkshire winter and early spring. If I were ever to keep Tanagers or Lorikeets, or birds of that nature, I think I should find Peat Moss a great help. Of course, where it is used, care must be taken to give grit and sand in a separate receptacle whether to cage-birds or chickens.

The "egg yolk" of the same excellent quality as formerly, can be obtained at 371, Essex Road, Islington; but whether the firm trading under the name of J. Abrahamus continues to supply the well-known "Mixture" I cannot say.

W. H. ST. QUINTIN.

## POST MORTEM EXAMINATIONS.

### RULES.

Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lanherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, *and a fee of 1/- for each bird.* If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons, and Canaries can only be reported on by post.

FEMALE BENGALKEE. (Mr. Jay R. Drummond Hay.) Apoplexy was the cause of death.

PAIR STANLEY PARRAKEETS. (Rev. H. D. Astley.) The male died of concussion of the brain from an injury to the base of brain caused by the bird's beak coming in contact with some hard substance. The second bird died from a small punctured wound caused apparently from a fine tack or wire and suggests to me that being frightened it flew up against a sharp pointed nail or piece of wire.

COCKATOO. (Her Grace the Duchess of Bedford.) Acute enteritis was cause of death.

ROSELLA. (Mrs. M. Lee.) Bird died of acute enteritis.

BLOSSOM-HEADED PARRAKEET. (Mrs. M. Lee.) Bird died of acute double pneumonia.

#### *Answered by Post :*

BLUE-FRONTED AMAZON. (Mrs. Mortimer.)

GOULDIAN FINCH. (Mr. A. Aitchison.)

Adult and immature RHEAS. (Rev. H. D. Astley.)

GREY PARROT. (Mr. Charles Isaac).

ARTHUR GILL.



### III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

#### NEW MEMBERS.

- Miss McWILLIAMS; 5, Den Crescent, Teignmouth.  
 \*Mrs. GUY SEBRIGHT; 52, Eaton Place, S.W.  
 Sir WALTER GILBEY, F.Z.S.; Elsenham Hall, Elsenham, Essex.

#### CANDIDATES FOR ELECTION.

- Mr. A. BRAITHWAITE; Clare House, Horsforth.  
*Proposed by Mr. A. SIMPSON.*  
 Mr. W. SIMPSON CROSS, F.Z.S.; 18, Earl Street, Liverpool.  
*Proposed by Mr. W. SHERRIN.*  
 Dr. GEORGE M. CREEVERS; 40, East 63rd Street, New York City.  
*Proposed by Mr. C. W. BEEBE.*  
 Mr. R. H. R. BROCKLEBAND; 9th (Queen's Royal) Lancers' Cantonments,  
 Petchestroom, Transvaal; and  
 Mrs. F. HESKETH; same address.  
*Proposed by Capt. B. R. HORSBRUGH.*

\* Proposed by the Hon Mrs. CARPENTER, not Mr. A. SIMPSON, as stated in the Dec. No.

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ROBERT GREEN, Aviaries, Covent Garden Market.

Advertiser, due home next March, will endeavour to bring Indian birds if suitable offers are received in time to collect them. See advt. in October number.

Captain PERRAU, 4th Gurkhas, Bakloh, Punjab, India.

(Continued on opposite page).

**JOHN D. HAMLYN,**  
**NATURALIST,**

**221, St. George's Street East, London.**

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## THE JOURNAL OF THE AVICULTURAL SOCIETY.

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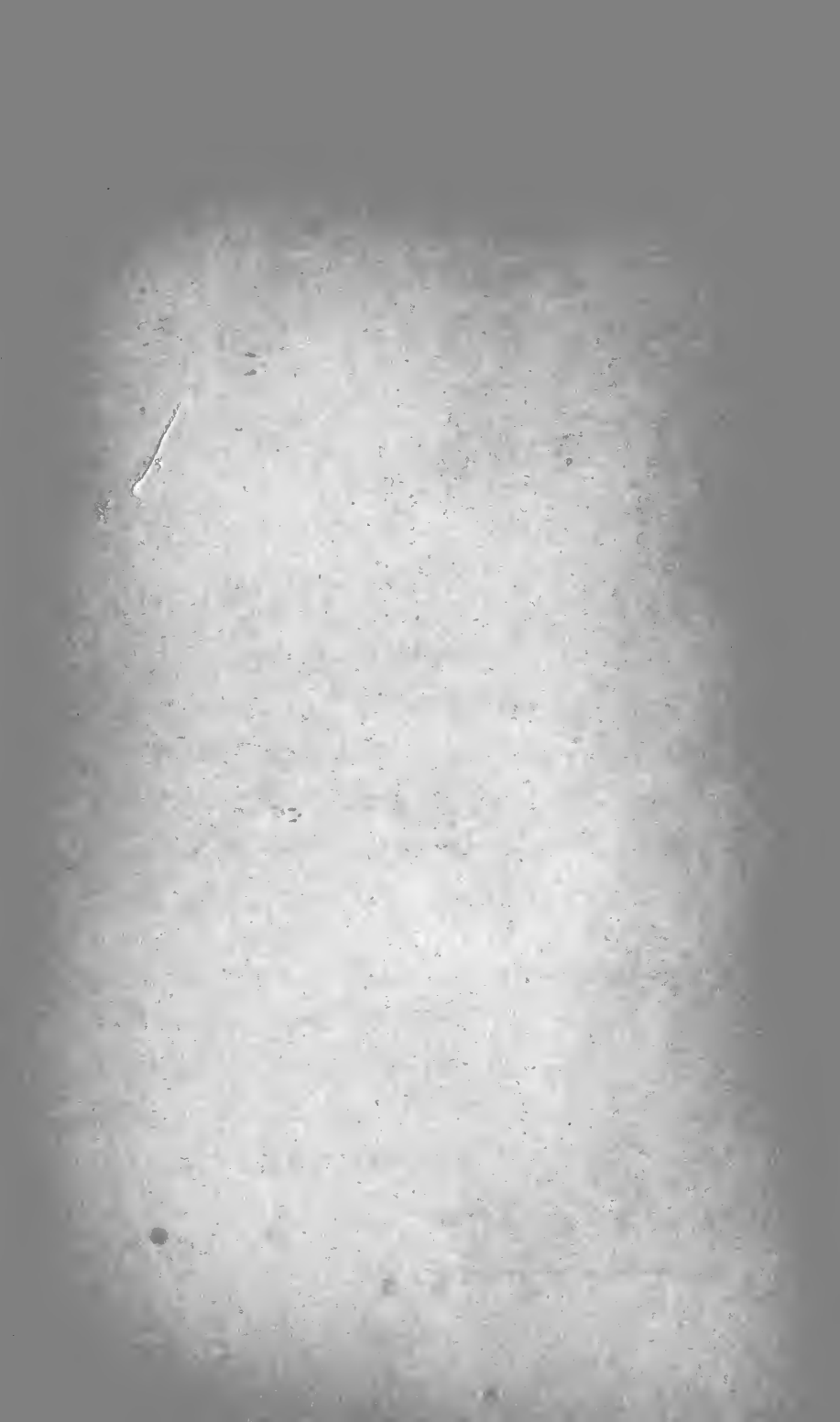
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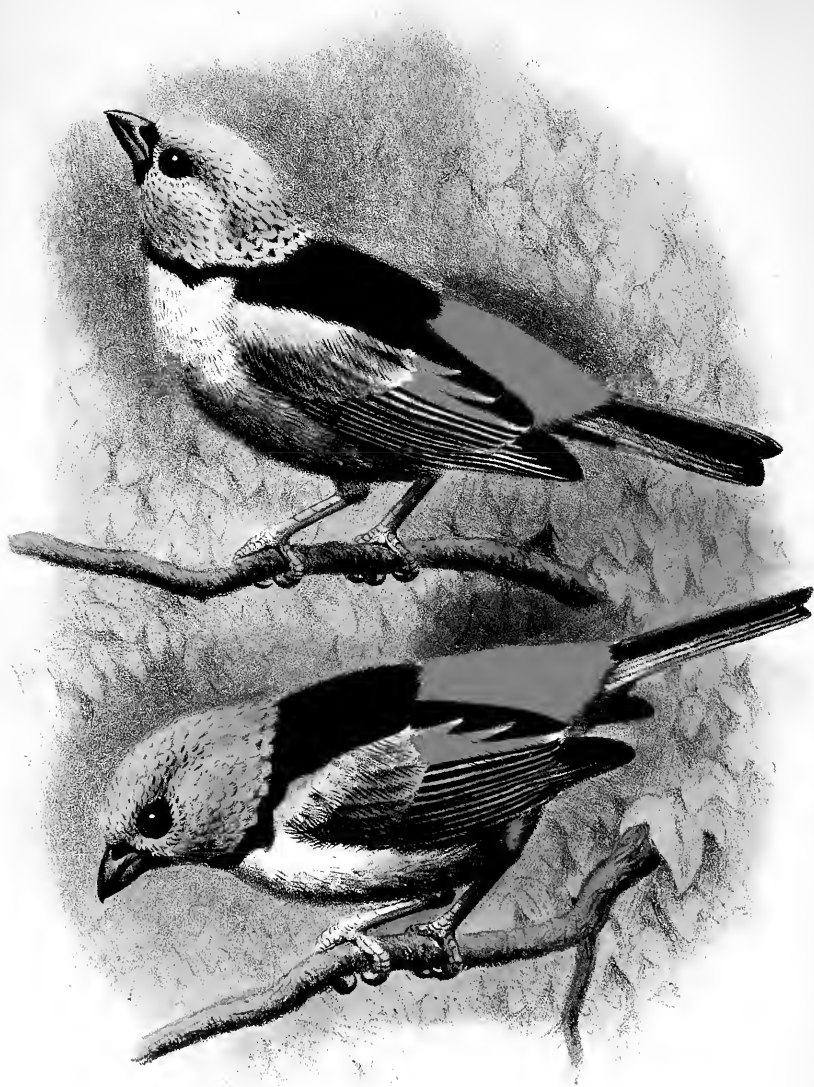
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*Continued on page iii. of cover.*





H. Goodchild del. et lith.

Huth imp.

SUPERB TANAGER, ♂. ♀.  
*Calliste fastuosa*.

# Avicultural Magazine,

BEING THE JOURNAL OF THE

AVICULTURAL SOCIETY.

*New Series*—VOL. VI.—No. 4.—*All rights reserved.*

FEBRUARY, 1908.

## THE SUPERB TANAGER.

*Calliste fastuosa.*

By ARTHUR G. BUTLER, PH.D., F.L.S., F.Z.S., M.B.O.U.

Although several illustrations of this lovely, though well-known Tanager have been published, in no case have they given any demonstration of the colour differences which certainly exist between the sexes. For that reason I have thought it well worth while to get Mr. Goodchild to make careful drawings of male and female in order that there may be no excuse henceforward for anybody to overlook them. (Lower fig. male; upper fig. female).

In the Catalogue of Birds in the British Museum, vol. XI., Dr. Sclater says of the female: "similar to the male, but rather less brilliant in colour"; but he does not point out wherein she is less brilliant, and as he describes the species as having the head and neck bluish green, it seems very evident that he had either a young male or a female in his hand, when penning the description.

The male Superb Tanager has the head and neck glittering yellowish-emerald-green; forehead and upper back velvet-black; lower back and rump, and outer borders of internal secondaries, deep orange-cadmium; lesser wing-coverts shining green, almost like the head; outer coverts purple; wings and tail black; primaries, inner secondaries and tail-feathers edged with purple; under surface of body mostly blue; chin black, followed by a band of green joining that on sides of head; a broad black crescentic belt across the throat almost joining the black of the back; breast and front of abdomen dull silvery blue, deepening

behind into rich purplish ultramarine: wings and tail below slaty-blackish; beak black; feet blackish; irides brown.

The female has the head and neck of a distinctly bluer emerald-green; the feathers on back of neck generally showing more of their black bases than in the male; the lower back and rump of a brighter more golden orange, by no means so dark as in the male.

In addition to these colour differences, the beak of the male is very noticeably heavier, both broader and longer than in the female. Hab.: Pernambuco.

The above descriptions are taken from fully adult birds which have attained their highest degree of colouring: young males, when seen sideways to the light, have the head and neck much more blue than old males; but, when compared with females, make the colouring of the latter look distinctly dingy; a young male has the lower back and rump of the same golden cadmium as a fully adult female.\*

No doubt the apparent variation in the colouring of male birds, due to age, explains why systematists have not indicated the above colour-differences. It is necessary to observe the change of colour in captive specimens, to arrive at the reason for the seemingly inconstant coloration of head and lower back.

Very little has been published respecting the wild life of the Superb Tanager: it appears to have been usually seen near the tops of tall trees, only descending towards the ground to feed or to nest. It is probable that, like the Three-coloured Tanager, it builds its nest of flower-stalks and grasses, ornamented outside with dead leaves, fragments of bark or tufts of cotton; lined inside with broad smooth leaves, and at the bottom of the cavity with fine grass and hair. The eggs, in like manner, are probably two to three in number, pinkish with deeper speckling all over and a few larger browner markings enclosing black lines. Whether, like its near relative, it also builds in banana-trees, remains to be seen. At various times I have had seven of these gorgeous birds; but, either owing to their poor condition when purchased or some slight error in feeding, only one of them lived for more than two and a half years, and yet I believe I fed them

---

\* Much deeper, however, than my oldest female.



much as I do my Archbishop Tanager, which bids fair to survive for many years yet, while my two Scarlet Tanagers, purchased in 1897, are still both in excellent health and plumage.

It has been asserted that these brilliant *Callistes* only utter harsh notes, but this is not true. The call-note of *C. fastuosa* is a shrill chirp which he utters as he flits, with a curious Hedge-Accentor-like flirting of the wings, from perch to perch; his ordinary song is not unlike that of some of the true Weavers, very harsh and unmusical; but his early morning song, which I like to think is also a courting serenade, is quite pretty and, as I have previously stated, not unlike the song of the Indigo Bunting.

The first Superb Tanager which I possessed was a female purchased on May 28th, 1897, which died on Dec. 12th, 1898, moulting twice in my possession. On the first of March 1899 I bought two pairs in rather rough plumage, and a fortnight later I bought two others, one of these died in May and one in June 1899, the first in such rough plumage that it was not worth preserving, the second not much better, but I had it made into a skin: two died late in the following year and of the remaining pair the male died on September 28th, 1901, and the female on November 17th, 1903. This last bird therefore survived for five and a half years, and yet at its death was more pronounced in its female characters than the younger bird illustrated on my plate: this would seem to suggest that whereas the orange in the male becomes deeper with age, that of the female becomes paler. If the moderately moist air of the lofty conservatory in which I have always kept my Tanagers had had anything to do with the gradual deepening of the orange in the males, it would certainly have affected that of the females in the same manner.

If I had to restrict my avicultural studies to one group of Insectivorous birds, I should certainly choose the Tanagers: they are not only about the most lovely of all cage-birds, but they are no great trouble to feed; as a general rule are quite friendly after the first moult in captivity; and, if in good health to start with, are likely to live to a reasonably good age.

Judging from the measure of success which has attended attempts to breed Tanagers in aviaries I see no reason why *C.*

*fastuosa* should not be bred, provided that a true pair be selected, and it is partly with the object of making such a selection easy that I desired to have the two sexes illustrated in colour. As we know nothing for certain respecting either the nest or eggs of this lovely Tanager, to breed it will be a distinct gain to science.

Of all the species of *Calliste* hitherto kept in cages, *C. fastuosa* is about the cheapest and undoubtedly one of the most beautiful. The following have been imported: *Calliste talao*, *C. fastuosa*, *C. tricolor*, *C. festiva*, *C. guttata*, *C. flava*, *C. cayana*, *C. pretiosa*, *C. melanonota*, *C. braziliensis*, *C. flaviventris*, *C. cyanoptera*, all of them beautiful birds respecting the wild life of which remarkably little has been published.

Why collectors in Tropical America have so rarely sent home notes on the habits of the birds which they have shot it would be difficult to say; unless the explanation be that those who sent them out, cared only for systematic Ornithology, and therefore instructed their collectors to devote all their time and attention to making big collections. Of course there have been private collectors, themselves enthusiastic Ornithologists, who have been quite as much interested in living as in dead birds, and it is to these and a few paid collectors that we are indebted for all that we know of the domestic economy of Tropical American birds.

---

## ORIENTAL AVICULTURE.

By COLLINGWOOD INGRAM.

In not a few respects, the Oriental is a more ardent and devoted aviculturist than his fellow-worker in the West. To fully realise this one has only to watch a Chinaman take his bird out for an "airing" just as an Englishman would take his dog for a walk. Cage in hand, the Celestial is observed hurrying through the dark and squalid streets of his crowded city, making for the nearest green field or, if this happens to be too far away, for the nearest open space. Having arrived at his destination, he quickly uncovers his bamboo cage which he then places on the palm of his hand and raises overhead, that the bird may benefit as much as possible from the morning air and sunshine. Thus exposed

to the open sky the Lark—for the favourite cage-bird is undoubtedly the Mongolian Calandra Lark (*Melanocorypha mongolica*)—will soon spread its wings and burst into a joyful song, to the evident delectation of its admiring owner. I have been told by English residents in Shanghai that this is by no means an uncommon sight, and I have myself, on several occasions, seen numbers of Chinese indulging their pets in a similar manner. I wonder how many Europeans would trouble themselves to this extent over the welfare and comfort of their feathered friends?

To judge by appearances the inhabitants of Shanghai must be exceptionally fond of cage-birds, for I saw great quantities being offered for sale in a certain corner of the old native city. Among these I was pleasantly surprised to see two or three examples of that beautiful species, the Siberian Ruby Throat (*Calliope camtschatkensis*), one of which was being kept on an open perch, where it was held captive only by means of a fine silken brace. This individual was so tame, and in such perfect plumage, that I was sorely tempted to buy it there and then, but upon reflection I realised it would be quite impossible for me to keep it alive during my travels, and refrained from so doing.

Another charming species was the diminutive Chinese Suthora, a little bird, that was being offered for sale at a very low figure as, indeed, were most of the other birds, almost all of which were either quite new to me or birds that I have very rarely seen alive in Europe.

So far as could be ascertained, in China the soft-billed species are not given any special food. They are apparently fed on raw meat and egg, with some kind of dried insect that looked to me like a Cicada. On the other hand, the Japanese—who are really skilled aviculturists—rely almost entirely upon a specially prepared food, which they seem to give with like success to Warblers, Tits, Buntings, Robins, Thrushes, and, in fact, to any bird that is either partly or wholly insectivorous. The same recipe is, I believe, used in almost all parts of Japan, and is as follows:—A fresh-water fish (usually a Carp) is first roasted over a fire and afterwards thoroughly dried and then ground into a

fine powder; which, by the way, is said to keep good for a long time. To one part of this "fish-powder" is added two parts of rice-bran, and a small quantity of pulp from the cooked leaves of a Japanese radish. The whole is mixed into a soft paste with a little water and is then ready for use.

Owing to the difficulty in procuring the ingredients for this preparation, the recipe will be of little practical service to the European, but at the same time it is of value, as it serves to emphasise the importance of *fish* as a food for delicate insect-eating birds. I feel confident that fish could safely be introduced into the diet of almost all soft-billed birds, when it would no doubt prove a very useful substitute for their natural insect food.

During my stay in Japan one of the handsomest species that I met with was Temminck's Robin (*Erithacus komadori*)—a quaint-looking bird that is a strange contradiction to our common Redbreast, the orange-chestnut colour being on the *back* instead of the breast. Curiously enough, for many years this Robin was only known to ornithologists as a cage-bird and for a long time no one could be certain of its exact habitat. It seems that these birds were brought to Japan from somewhere in the South by native boats, an assumption that has subsequently been proved correct by the fact that collectors have now procured them on the Yaye-yama group of the Liu-chiu Islands. I saw perhaps a dozen examples in all and these were mostly in the bird-shops of the more Southern towns—Nagasaki, Kobe and Osaka.

After the pretty little White-eye (*Zosterops japonica*), it is difficult to affirm which is the most popular cage-bird with the Japanese, as so many varieties are kept by them in captivity. The beautiful Varied Tit is, of course, a great favourite, but Buntings, Bullfinches and Larks are also commonly seen, as are many others. Perhaps the most beautiful Finch that came under my notice was a newly-caught example of the Japanese Rose Finch (*Carpodacus sanguinolentus*). This bird (together with its mate) I afterwards brought home with me to England, but alas! it has since moulted its bright rose-red livery and has acquired a dull greyish-brown plumage, like that of the female from which it is now barely distinguishable.

It may not be out of place to mention that some Sacred

Cranes (*Grus japonensis*) were breeding in captivity at Kioto when I was there in April. A pair of these birds could then be seen feeding their young on large earthworms, numbers of which had been placed for their benefit in a corner of the aviary. Although the fledgelings were no doubt capable of feeding themselves, the worms were always first selected by the parents, who held them in their bills until taken therefrom by the young birds.

---

## A FEW AVIARY NOTES.

By Mrs. GREGORY.

I have been asked to write a short paper on my avicultural experiences of the past year. I have not much to record and my collection is only small, but I trust the following few incidents may be of interest, especially to those who keep birds of the same kinds.

In January, just a year ago, a Red-legged Partridge was brought to me on a cold snowy day. It was very hungry and very wild. I put it into a run with Pheasants and Doves, and all were friendly, but it was painful to see this wild bird dashing itself against the wire netting, sometimes making its head and face bleed. But after a few weeks it became tamer, and one day, having escaped from the aviary, I was surprised that it did not fly away. All day it remained in the garden hiding, but at dusk it came up to the run of its own accord and I was able to drive it in.

Last March, when I was passing close to a Demoiselle Crane, I saw her open her beak as if gasping. I ran to fetch water expecting to find the bird in a fit, or ill. Instead, she was standing, proudly arching herself, over an egg which she had just laid. I shut the pair of Cranes apart from the rest, but no second egg was laid and they did not attempt to sit. All they showed was an extreme restlessness to join a third Crane—a male I have had for six years.

On June 9th, a Silver Pheasant Hen laid five eggs under one of the dining room windows. She scraped out a hole close to the house, completely screened from view by a large clump of

Michaelmas daisies. Here she sat very closely, not even getting off to take food and water, which she let me put within her reach. A few days before the eggs should have hatched out, I saw the hen walking uneasily about and, on going to look, found the "nest" empty. At first I thought a rat had carried off the eggs, but presently discovered they had fallen down a hole and were completely buried in the sandy soil. Only one egg was warm and this hatched out in due course. When the chick was only one day old the mother walked off with it to a secluded part of the garden, and fed and looked after it entirely herself. Once she was seen driving off a cat—looking so formidable with wings outspread and hissing loudly that the cat beat a hasty retreat. At the end of six weeks she brought the chick amongst the other birds, and sometimes into the run where the male pheasant Swinhoe + Silver treats it very well.

Since writing about my Trumpeter in the November magazine, the severe frosts have made me anxious about him as I can see he feels the cold very much. One morning I found him with a leg and foot stiff and frozen. I carried him into the house and gradually warmed them in my hands until circulation was restored. During the frosts I keep him indoors, only letting him out for a run in the middle of the day. He makes himself quite at home, *runs* up and *flies* down the stairs after me, and roosts on a special chair at nights. When the sun shines through the windows he stands in its rays with spread wings and bent knees, and basks before the fire in the same way. Sometimes lying down on the rug with his wings out.

I should like to add, in conclusion, that if any Member is visiting Bournemouth, and would like to see this interesting bird I shall be very pleased to show him. He wins all hearts by his delightful way of running up to strangers, making pretty little chirping sounds to attract their notice and attention.

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## ON THE BIRDS IN MY AVIARY.

By Mrs. E. J. JOHNSTONE.

I rather fear that this article may not be very interesting to the majority of the readers of the Magazine, for the reason that I have now only a few birds, and those not usually kept—but all experience is valuable and mine has been bought very dearly, (in this I am sure I am not alone) so I hope these notes may be acceptable.

At present the inhabitants of my aviaries are very mixed—Touracous and small finches, Marmosets, King Birds of Paradise and Lorikeets. I do not mean they are living like a happy family in one division. I fear if this were so, it would be a case of the ten little niggers and only my beautiful Lion Marmosets would live to tell the tale. No! I am a believer in “one pair of birds, one division,” and as far as possible carry this out, at any rate in the breeding season. This arrangement limits me very considerably, but I feel sure nesting successes are more probable and the birds live longer and more healthily. I will take my divisions as they come and give a short account of the tenants.

In the first division is a flock of Parrot Finches, four of which I bred last year, and a pair of Gouldian Finches. These little gems, the Parrot Finches, if nesting is to be successful, *must* have a division either with a pair of larger birds or to themselves.

Last year, in April, one pair were turned into a small additional aviary, with only an old wooden summer house as a shelter. They at once commenced to build and hatched four young ones. In June, owing to a consignment of birds arriving from New Guinea and being pressed for room, two more pairs of Parrot Finches and the Gouldians were turned into the aviary. I saw at once that all hope of another successful nest was at an end. In every available box or shrub a nest was constructed, and as fast as one pair completed a nest, another pair removed the interior, or any stray bits of hay that took their fancy, and deposited it in another box, and so on through the summer. It was not that there were not ample feathers, moss, hay, etc.: I

half-filled the summer house with materials but evidently the fact that one pair fancied one special box or possessed a good supply of feathers, was quite enough for another pair to come and remove the feathers or take possession of the box. The result was a few clear eggs and innumerable empty nests. So this year they will be divided up and placed with larger birds and I hope they may be overlooked and allowed to nest in peace.

Next door to these energetic mites live a cock King Bird of Paradise and his two wives—at least I hope that both the little brown birds are females—one is, I know, for two reasons: firstly that she brought up, entirely on hard boiled egg, a nestling King Bird brought by a native in New Guinea to Mr. Goodfellow, their importer. It was found on the ground having evidently fallen from the nest. It was placed in a cage, half of which was wired off, and the little hen fed the baby through the wire. Mr. Goodfellow, seeing this, placed them in one division, and the baby was completely and satisfactorily reared. This is one reason, and the other is nearly as good. She gives the other two inmates of the aviary a very bad time—that is unless they immediately vacate the food pan, grapes, apple or whatever her ladyship fancies at the moment—with wings half spread and quivering, neck stretched, beak open, she darts at them, a picture of fury, a positive virago, and woe betide her beautiful mate if he does not instantly make way.

The other “hen” is I am inclined to think a young cock, his beak is a clear yellow, her’s a dusky yellow. He is slightly bigger and more clearly marked, and very submissive.

These birds seem to be as hardy as Thrushes, they look brighter if possible when the temperature is 40 to 45 deg. They love the fresh air and dart eagerly out of doors when the windows are open. In the small outside flight is planted a thick, ivy bush, in which they delight. It is hunted over and over, for, I imagine, small insects; the dead leaves were all picked out and carried into their covered aviary by, I believe, the young cock, and after a little dancing, dropped. To my surprise one day, I saw him *swallow* a leaf and I expected some bad result, but it had no effect of any sort. I feed these birds on damped insectivorous food I make myself; grapes, apples and oranges, and any other



fruit in season. They constantly call to each other, but I have not seen the cock display for some weeks, probably the cooler temperature and want of sun would account for this.

In the next division is a pair of White-crested Touracous (*Turacus corythaix*) handsome birds, but not nearly so interesting as Fraser's Touracou. They will eat nothing but banana, and hawthorn berries, when in season, which I give in large boughs, these they completely strip in a very short time and I was very glad to discover how fond they were of this berry; they make an excellent change for them and are a most inexpensive diet. These birds are larger than Fraser's Touracou, rather brighter in colouring and quite as handsome and hardy.

Next door lives a beautiful pair of Lion Marmosets. I feel I ought to have left these out as they are not birds, but I cannot pass them over without a few words for they are indeed things of beauty. The silky, golden red hair and little soft brown intelligent faces, very gentle, daintily quick in movement, in fact most interesting personalities. They live in a box, into which they dart with a rush if a stranger approaches. They go out every possible day and always have their windows open for a short time in the worst weather. As far as I can tell at present, they are not afflicted with that delicacy of which dealers have warned me. One dealer told me he had discovered the way to keep them alive. I naturally listened with deep interest. "They must be kept near a hot stove with a large pan of water on the top, so simulating their native climate"! I have had these Marmosets since June, in the best of health.

Fraser's Touracou comes next. I feel I have already written in a previous article an account of these charming birds, so I must not take up valuable space with reiteration. I lost the cock bird over a year ago, but the widow and her son are still in the best of health. She is as charming as ever, and will always spring lightly down to be stroked and petted, throwing back her dainty head with a hoarse "caw! caw!"

She is an indefatigable nester, and last year laid and sat on several clutches of two eggs. These birds will eat quite a variety of food, bread and milk, soaked biscuit squeezed dry, sultanas, banana and other fruits. They are very fond of bathing

even in the coldest weather, and dart straight into their bath when it is first placed in the aviary.

Some Lorikeets are their next neighbours; the Black-throated Lorikeets, and the rare *T. cyanogrammus*, the latter a very handsome bird, not unlike the Blue Mountain, but larger and more brilliantly coloured. I have fed these birds entirely on sweetened milk alone, oranges, apples and a little spray millet. I lost one when first imported but they look in splendid health and are as lively and merry as possible. They delighted to scramble up and down the wires trying to catch some Black-eared Marmosets in the next division. The Marmosets had visions of Lorikeet for breakfast, but in attempting to realize this, only had their fingers bitten.

I now come to my new aviary of four divisions, specially built for the King Birds of Paradise, and with the exception of one division in which are my Lorikeets (*Loriculus Johnstonia*), entirely inhabited by these lovely birds.

I have already written a short account of these Lorikeets and they have been figured in the Magazine. They are in the best of health and I hope will be more successful this year in their attempts at nesting than last, for they only produced two clear eggs. They sat on them industriously with no result, so I rescued them before they were broken and sent them to the Nat. Hist. Museum, as a small offering. Some day, perhaps, I may be allowed to describe my new aviary, which is the result of ten years' experience. I really think it is as near perfection as possible, at any rate, the birds which inhabit it are in the best of health and condition and I hope I shall have some nesting experiences to record in the coming year.

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THE KAGU.

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In fulfilment of his promise, made in our Magazine Vol. 3, N.S., p. 280, Mr. H. E. Finckh, of Sydney, has kindly forwarded us three excellent photographs of this most remarkable bird, one of which has been already reproduced in *Emu*, IV. pl. xii. They represent the bird advancing, one foot raised, with head well up, feathers fluffed out, wings partly expanded, tail depressed, with the beautiful crest raised and expanded to its full extent: from the front view the bird looks not unlike a Red Indian adorned with a coronet of feathers. As we have already given three figures of the bird, it seems unnecessary to reproduce any of these photos, most excellent though they be. They are accompanied by the following interesting notes: "I was pleased to notice the remarks on the Kagu in your July Magazine. I have taken a great interest in this bird, and have had several in captivity for some years. I have had them lay an egg, and also hatch a chicken. The Kagu lays one egg in the season, the chicken hatches in five weeks, unfortunately the life of the longest living chick was 14 days, the feeding of the chick is the trouble, but I hope to succeed yet, although eight years have been without success. I consider the Kagu one of the most interesting and fascinating birds to keep in captivity, becoming so tame. It is a great misfortune that these birds have almost become quite extinct. I am continually in communication with folks, who live in parts of New Caledonia, where 15 years ago the Kagu was fairly plentiful, but now it is a great rarity to see, or even hear of one. As your Magazine remarks, the Kagu eats insects and meat, cut very small. Of late I have added a few other birds to their enclosure, which live on grain, canary seed, and cracked corn (maize), and to my surprise my two Kagus have taken to eat the corn. They began on a few pieces only, but now I notice them pick up ten to twelve pieces several times a day."

From the above, it seems evident that this fascinating bird must shortly vanish from our midst. As long ago as 1882 Messrs. E. L. and E. L. C. Layard remarked: "In former times

it seems to have been generally distributed all over the island (New Caledonia) but it has now nearly disappeared from the neighbourhood of the more settled and inhabited parts." Its extinction should be very deeply regretted by aviculturists, as it seems to thrive well in captivity, and no bird could be more interesting to keep than this, with its varied moods, one moment walking in stately fashion, the next perhaps indulging in the wildest antics and frolics, rivalling and excelling the so-called waltzing performances of the Ostrich, of which we have lately heard (see Journal S.A.O.U., Dec., 1907). Every note respecting the habits of this doomed bird should be treasured. We owe Mr. Finckh a debt of gratitude for having found out so much about its life-habits. He has told us the duration of incubation and has described the newly-hatched chick. In *Emu* V. p. 32, he gives an account of the nesting of a pair of birds in his aviary, incubation lasted five weeks and one day, the male bird sitting about four weeks out of the time, on the 32nd day the egg was observed to be cracked, four days after a dent was noticed in it, the male bird was then seen to carefully peel the egg to about two thirds without damaging the inside skin, the chick moving freely and chirruping, towards evening he broke the skin, and the next morning the chick was perfectly out, and dry—a lively fluffy ball, with a big heavy head. The old birds were very anxious to feed it by dangling as many as six worms at once in their bills round its head. The chick, however, was very helpless, and only lived eight days, in colour it was dark brown, with light fawn markings, legs and feet brownish, eyes black. A photo of the chick is reproduced, which shows it to be as well-covered with down as a young gallinaceous bird. It has an enormous round head, nearly as big as its body, with large prominent eyes. Once more has the study of the living bird accomplished that which the scientific collector has failed to do.

T. H. N.

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## IS THE PINTAILED WHYDAH PARASITIC?

By Dr. A. G. BUTLER.

In the "Journal of the South African Ornithologists' Union," 2nd ser., vol I., pp. 9-11, is an article by Mr. Austin Roberts, in which he attempts to prove that *Vidua principalis*, instead of building a nest for itself and incubating its own eggs, substitutes them, after the manner of a Cowbird, for the eggs of Waxbills and leaves them for the latter to rear.

Mr. Roberts first got this idea into his mind from hearing that, according to the Zulus, a young *Vidua principalis* is reared out of every nest of *Estrilda astrilda*. Subsequently the discovery of two sizes of eggs in Waxbill's nests, a difference in one of five fledglings in a Common Waxbill's nest, and lastly the fact that he observed a hen Pintailed Whydah leaving a nest of this species, in the passage of which he found a half-devoured egg, and in the cavity one egg larger than the others, convinced him that he had obtained the true explanation of the difficulty of discovering the nest of the Pintailed Whydah.

So much for the evidence in favour of parasitism. On the other hand the late Dr. Stark described nests of *V. principalis* very minutely, and says that all those which he found contained young birds; and, as Mr. Roberts admits, "without the least doubt as to the identity of the nests and the young birds."

Stark indeed says that "the eggs are not yet described," and this statement opens the way for the conclusion at which Mr. Roberts arrives, that the larger eggs in the nests of Waxbills belong to the Whydah. If so, we must conclude that, like *Hypochera* and unlike other Whydahs, this species lays a white unspotted egg; but Captain Shelley tells us unhesitatingly:—"The egg is glossy greyish white, with underlying violet marks and clear black or dark brown elongated surface-marks, evenly distributed. It measures  $0.68 \times 0.50$ ." As with Dr. Stark, his description is given without the least doubt as to the identity of the egg.

When a typical Whydah's nest has been described—"the ends of the growing grass being tied together over the nest"

as in other Whydah's nests, nestlings identified as those of *V. principalis* inside (and for all we know to the contrary the parent hen visiting and feeding the same); when also a typical Whydah's egg has been described as that of *V. principalis* by the highest authority on African birds; it needs more than a negro proverb, disparity of size in eggs, or the fact that *V. principalis*, like hundreds of other finches, is an occasional egg-stealer, to convince one that it is parasitical in its habits after the fashion of a Cowbird. Unless Dr. Stark actually saw the hens of *V. principalis* visiting the nests, how could he be sure that they belonged to that species?

There is frequently considerable disparity in the size of eggs laid in a single clutch by the various smaller members of the *Viduline Ploceidæ*. At the end of the year 1906 when I cleared out the nesting-receptacle in which my pair of Gouldian Finches had been sitting, I found eight eggs sufficiently recently laid for me to be able to blow them without trouble; the difference in size between some of these is extraordinary, the smallest being I should judge about one third less in bulk than the largest. I have no proper measure handy or I would give the exact dimensions in tenths of an inch or in millimetres; but everyone who has bred either Grassfinches or Waxbills must have noticed how very inconstant to size the eggs of these birds are.

Of course now that the question has been raised, it will have to be decided one way or the other by irrefutable evidence. It seems a pity that this was not secured before Mr. Roberts began to call in question the reliability of Dr. Stark's observations, he appears to have been unaware of Captain Shelley's confirmatory evidence.

If Mr. Roberts can bring forward convincing evidence that *V. principalis* differs from all its relations in neither building its own nest nor incubating its own eggs; it will then become necessary to discover what species of Whydah built Dr. Stark's nests and laid the spotted type of egg described by Captain Shelley.

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## NOTES ON MY BIRDS.

By ROSIE ALDERSON.

I have not added many birds to my collection during the past year or two but, on the contrary, have diminished my numbers, as I found my aviaries were too full to allow the birds to breed successfully; but as it is some time since I sent any account of my birds to the Magazine, and there are many new members since then, they may like to hear a little about my pets and their ways. I never know quite how many birds I have, as with deaths, new purchases, and young ones being bred, the numbers are continually changing, but I suppose there are about a hundred altogether.

To begin at the beginning, or rather to start with the nearest aviary. This is a fair sized one—some 12 ft. wide by 18 ft. long—it is built close to the house, one side being formed by the end of the dining room outer wall. The front of the aviary is open wire work down to the ground, but the side is wire only half way down, the remaining portion being boarded. The entrance is at this side through a porch and double door. The greater portion of the aviary is taken up by a flight with a tiled floor and covered with a glass roof; at the back is a wooden shelter with a wire and wood front and a door opening into the flight. The only occupants of this aviary are the Crowned Cranes, a very fine pair of birds, sent over by a friend from Nigeria. Our friend had once said, whilst on a brief holiday to England, that he would send us some of these beautiful birds, but we did not take the offer seriously, and so were taken quite by surprise when one day a telegram came saying that the Cranes were on their way. Our friend had kept these birds as pets and, being ordered up the country 500 miles, he had not been able to take the birds with him, so sent them home to us. He told us later that the poor birds had a terrible journey when in charge of the natives whilst being conveyed down to the coast. The blacks seem to have little regard for any animal or birds feelings, and thought it of little importance as to whether the Cranes were carried right or wrong side up.

The birds arrived in England in January of last year, they

came in a sort of giant hencoop, with a front of bar of wood, several of which could be raised to let the birds out. Although they had spent the whole time of the voyage on deck and had weathered a terrific snowstorm, just before they got into port, the Cranes reached us in excellent condition.

Not many of our members may have seen a Crowned Crane, and as I think it is very uninteresting reading about a bird when you do not know what it is like, I will try and describe them to you. They are very tall long-legged birds and stand about four feet high, the cock being rather larger than the hen, though the colouring of both birds is practically the same. The male bird however has a little knob of pink flesh under the chin, though this is difficult to see unless you are very close to him. The general colour of the long neck and body is greyish black, but the wings and tail are white and chocolate brown. On the head is a beautiful crest of pale golden bristle-like feathers. This crest is very thick and stands straight up giving the birds a very distinguished appearance. The cheeks are of bare skin and have a distinct dividing line across them, one part being pinkish white, the other bright carmine pink. The eyes are very pale blue-grey, almost white, with a dark iris; the bill is black, not very long but sharp and pointed. From this description you will see the Cranes are very handsome birds and they have a very stately walk, which adds further to their fine effect. They generally march in single file, the hen, who is the master spirit, leading the way as they wander over the garden at will. But this is going on a long way in my story and I must take you back to the time of the Cranes arrival. It was in the depth of winter when they came, and we feared the effect of the cold damp weather on the birds. The best provision we could make for them was to put them in one division of my largest aviary, that is heated with a large coke stove in the passage running along the back of the house.

The space at our disposal was only small, some 7 ft. by 22 ft. divided into three parts (with communicating doors) namely, a flight and two shelters, added to this space was a further flight joined on at one side and grassed over. The first difficulty was to get the Cranes out of the coop. It was so wide



it would not pass through the aviary door, and the birds resolutely refused to come out when the coop door was opened and the coop placed against the open doorway.

We did not like to catch the Cranes, for to tell the truth the sharp bills of such tall birds were not very pleasant in such near conjunction to one's eyes. The persuasion of gentle pokes with a stick only made the Cranes stand further back and matters began to look desperate. There seemed nothing for it but to put down the coop by the open aviary door and wait till hunger drove the birds out. Then someone thought of the very simple plan of loosening a single board at the *back* of the coop and driving the birds out with a stick. Why no one had thought of such an easy solution of the difficulty before I do not know. It took effect at once and in a few minutes the Cranes were safe in their new quarters.

But we soon found the place was far too small for them. Cranes are great jumpers and, when frightened, the hen, who was by far the most nervous of the two birds, did not hesitate to jump upwards, a course of action very alarming to the onlooker as it sometimes meant she cut herself on the wire netting and lost a good deal of blood. At last there was no denying the fact the Cranes must be pinioned and have their liberty, or we must send them away to someone who could accommodate them better. We dreaded the pinioning and pictured the birds as dying under the operation, and there was a still further gloomy side to the picture even if they recovered. My family take the keenest pleasure in our old-fashioned garden. No doubt the Cranes would look pretty walking about in it, but suppose they were not content with merely *looking* at the plants and flowers! They might be as active working gardeners as Peacocks are, and if they were it would be too terrible a thing to contemplate. We were not without experience of suffering in the past. Some Fancy Waterfowl we once had, though otherwise most interesting and beautiful pets, always made a practice of walking straight *through* a large patch of lovely blue Omphalode in my sister's rock garden on their way to the little stream each evening. They wore quite a track through the plant, and it was a little thoughtless of them as there are plenty of gravel paths down to

the water's edge. Further, the ducks had a fine taste in the young shoots of *Campanulas* to add to their other crimes.

But to return to the Cranes. The die was cast at last, and we arranged with Mr. Thorpe, of Hull, to come over and pinion the birds, bringing a man to help him. We arranged that the operation should be done in the aviary they were in, in the lower garden, and that afterwards they should be carried up to the aviary I first told you of in the top garden near the house. The two gardens are divided by an old yew hedge with a wicket gate at each end, and as this top part is protected all round on every side there is no fear of the birds getting away, and there being plenty of room they can enjoy their liberty whilst we have the pleasure of watching them from the house.

The pinioning was over very quickly. I was not present but I saw the birds directly after it was done. Mr. Thorpe carried them one at a time up the garden under his arm and deposited them in the aviary that was now to be their home. The birds seemed very quiet but otherwise not much the worse for the operation. The hen's wing was the worse to do. In some way, perhaps owing to an old injury, the joint was very thick and stiff and difficult to cut through. I must tell you a little incident about the pinioning that may amuse you, though the laugh is against myself. I am a coward at the sight of blood, it always makes me feel faint, though if I am given something to *do*, not just to look on at such a time, I feel it much less. I had not actually seen the Cranes pinioned for, apart from not caring to, I was very busy seeing about their new home being made comfortable. I had just about finished when Mr. Thorpe appeared, coming up the garden, carrying the cock Crane in his arms. As he drew nearer I saw to my horror a large patch of scarlet at the side of his coat. I thought 'how that bird has bled,' and I began to wish I was somewhere else, but I crushed the feeling down and went on with my work; and, do you know, when Mr. Thorpe got nearer my large patch of gore turned out to be his scarlet handkerchief hanging half out of his side coat pocket. So much for too vivid an imagination!

For the next few days we kept the Cranes very quiet. I have canvas curtains run with rings over a thin metal rod, that

can be drawn at will right over the front of this aviary. This simple plan keeps out much of the cold in winter, and also keeps out a worse enemy still, the prying gaze of strange cats. Not only at night are the curtains useful but also in the day time, if it is wished to keep any birds especially quiet. So for two or three days the Cranes were kept as undisturbed as possible, and then as they seemed all right the curtains were drawn back and their door opened. We dreaded when they *did* come out into the garden how we should get them back into the aviary at night, but our fears were quite needless. The Cranes proved very intelligent, and soon got into a regular habit of marching back to the aviary at what they considered their bedtime and going in of their own accord. Their door stands open all day, and after they have gone in it is locked till morning. All the same the Cranes are very particular and on no account must be put off at their appointed time or they may turn tiresome and refuse to go in. Once we had some friends in for croquet, and the game being a long one the players were still on the lawn at the time the Cranes wanted to cross it to get to their house. They came so far and then turned sly and went back, and that night and for several nights following they were very unsettled about going in. Further, they are very suspicious. Another time they were going into the aviary when they hesitated and did not seem to care to go on, and on looking we found a broken twig had blown across the doorway, and I suppose they thought it was a trap, anyway the twig being removed their objection to going in was removed also, and they went inside quite quietly.

In the shelter is a layer of peat moss litter and at one end, on the top of this, a thick layer of straw. I believe the Cranes crouch in this at night as I have seen them do on the hot asphalt walks on a summer's day. They look very curious when squatting on their knees, for naturally they don't kneel as we should do with our feet backwards but the reverse way, with their feet in front of them.

The Cranes live on wheat, dari, hemp, and rice, and seem to thrive on this diet, also they have what insects we can get, and are especially fond of live blackbeetles. We empty them out of the traps into shallow pans of water, out of which the birds pick

them. The Cranes know quite well what the sight of a beetle trap means now, and if they see you with one in your hand they will probably come out of their favourite corner in the shrubbery to meet you. They are birds that delight in water and "REX," the cock bird, will go right into a very large zinc bath that is always kept filled for them and make a fine splashing. We found, after all, the Cranes were not plant eaters but, what is almost as bad, they are plant *sitters*. I do not know if the hen had any idea of nesting last summer, but she chose to sit continually in the centre of a large bed of crimson ivy leaved geranium, "REX" standing guard over her meantime. Later they turned their attention to beds of Verbenas and other plants. We could not do away with the flowers, nor did we want to do away with the Cranes, and so the gardener, who was very patient over the affliction, for really it was trying to see his bedding out so spoilt, put small stakes and twine (a sort of miniature fencing) all round the outside of the flower beds. I hope, as the novelty may have gone off by now, we shall be able to dispense with this protection in the summer and enjoy our flowers undisturbed. I have not seen the Cranes on the beds for a long time now, though I once saw "REX" very cautiously try his weight with one foot on the top string and, finding it would bear him, I believe he stepped over. The Cranes are a most devoted couple and it is very amusing to watch them. They will stand motionless facing one another, gazing into each other's eyes, then solemnly bow and shake their wings, and stretching them out above their heads perform a sort of love dance. It is only when the wings are spread that the pinioning shows badly, for two joints were taken off one wing in each bird, when the wings are in repose you would not notice it.

One last word about the Cranes before you are tired of them. You should see them cross the garden in a series of long jumps with stretched out wings and necks. First one bird goes and then the other, and "Hop o' my Thumb" is not in it. But it is not very often they so far forget themselves, as a rule they are far too stately to indulge in such mad behaviour. And now I will take you down to the lower garden to see almost the first aviary I ever put up. It is heated with hot water pipes, a bad

arrangement as the Doves, who like to be comfortable, *will* sit on them, and it must be very weakening. The front is all glass shutters that can be taken down independently of each other. The aviary itself is built of two thicknesses of wood with a felt lining between, and is built against a wall. It is about 15 ft. high at the top of the span, and has two opening skylights in the roof, and a window at each end, so there is plenty of light. It is divided into two parts, one rather larger than the other and is entered at each of the outer ends by a little porch and double door.

The smaller half has at present only seven occupants. One is a hen Crested Dove that is about the oldest bird I have. Years ago she hit her wing and crippled herself from ever flying again for life. But this did not daunt her spirit, she could climb if she could not fly, and frequently used to get right to the top branches of the aviary. But pride had literally a fall. She would perhaps be startled and lose her balance and tumble to the aviary floor, apparently being none the worse for her fall. But one day, to my horror, I found she had an enormous wound on her breast. It was almost unnoticeable, through the feathers covering it, till the bird was examined and I could only conclude it had started with her first falling and with repeated falls had never been able to heal properly. It was so terrible a wound, though it did not bleed, that I thought of having the bird destroyed, but her life was spared and the place not only healed but you could not tell where the wound had been if you were to look at her now. Of course her climbing propensities had to be stopped and all branches fixed above her reach except a long one to perch on. In this aviary is one of my special pets a little Blue-cheeked Barbet that is known by the name of "Barbie." He is such a bright cheery little fellow and always contented and happy, and is no trouble to keep. He lives on a diet of "soft" food, that I buy at 8d. a lb., mixed with crushed biscuit and moistened, and a little cut up fruit every day for dessert. "Barbie" has a varied appetite and nothing comes amiss,—banana, sweet water grapes, orange, tomato, chopped pear and apple, and elderberries, sometimes too,—he likes a little dry biscuit broken up small. I have had "Barbie" now for some years so may consider him well

acclimatised. He is a very pretty bird, though an odd shape, something like a Kingfisher but rather larger, with a very big head and heavy bill. The top mandible is almost straight, and the bottom line of the lower mandible very curved, which makes it look as if the beak was fixed on upside down. The Blue-cheeked Barbet is a very brightly coloured bird. His body is grass green, the head scarlet and black, and the cheeks and upper part of the throat a most lovely shade of turquoise blue, finished off by two little red patches just below the throat. The lower part of the breast is a very soft green, lighter than the back, the wing quills are black and the eye deep brown with a black iris. It is very pretty to watch "Barbie" when I bring him his dish of fruit. I put it down on the floor and he eyes it with his head on one side, then he flies down to a lower branch still and pauses again (he seldom flies down at one swoop) and then descends to the floor. Once on the ground he progresses by a series of hops and then sitting on the side of the dish, begins his feast. But he is a shy little bird. You must keep very still or he will fly off and wait till you are gone, but it is the same in watching all aviary birds, you *must* keep very still if you want to notice them in a natural condition.

The Barbet deserves a good conduct mark for his very peaceable disposition. He has lived in quiet with Doves and Parrots and never injured anything, but he *looks* as if a taste for eggs might be in him if he had the chance, and in this respect it might be well not to place him in temptation.

*(To be continued).*

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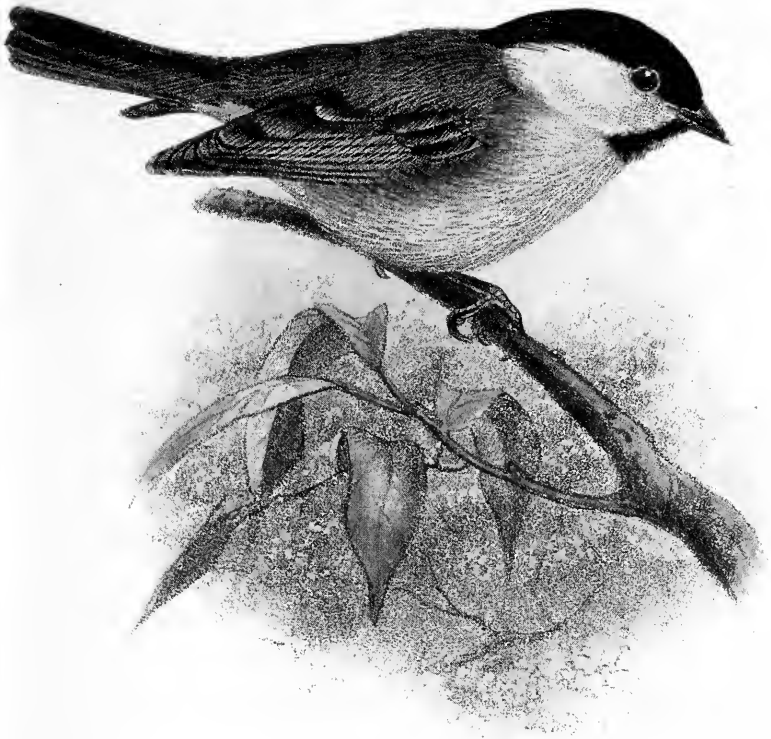
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## NOTICES OF NEW BOOKS, ETC.

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BIRDS OF BRITAIN. By J. LEWIS BONHOTE, M.A., F.L.S., F.Z.S., M.B.O.U. Containing 100 full-page illustrations in colour selected by H. E. DRESSER from his "Birds of Europe," 399 pages of text. A. & C. BLACK, Soho Square, London.

A delightful volume, pleasantly written, by one of our most industrious members! It would be absurd for the owner of a volume so splendidly illustrated to consider that he had not received far more than his money's value if the text had been



From Bonhote's "Birds of Britain."

MARSH TIT.





merely compiled from the writings of other Naturalists, but in this 20/- volume Mr. Bonhote tells us that his observations are taken at first hand straight from Nature, and it is evident that this is so, from the fact that in his descriptions of nests, the author occasionally differs somewhat from other observers.

There can be little doubt that the materials and even the character of a nest differ somewhat in various parts of the British Islands, and it is possible that even the number of eggs laid may vary: thus whereas all the nests which I found in Kent of the Lesser Whitethroat were far more compact and neat than those usually constructed by its Greater cousin, Mr. Bonhote found the reverse to be the case in those which he met with. In like manner all my nests of the Yellow Hammer, though tolerably firm in the interior, had the outside walls very loosely constructed. In England certainly, as stated by Mr. Bonhote, the usual clutch is five (I have frequently found four); but it has been positively asserted by one or two Scottish collectors that three is the usual clutch in the north of Britain. In his descriptions of eggs the author has, perhaps wisely, confined himself almost invariably to the most frequent type.

Where the work all-round is so excellent, it seems perhaps hypercritical to find fault, but I cannot help wishing that Mr. Bonhote had not confined his observations on the sexes of many birds, to the bare statement that the plumage is *practically* alike: in the case of the Robin, for instance, it would be equally easy to state that all the reddish orange on the forehead, eyebrow, lores, front of the cheeks, and especially of the chin, was more or less smoky in the hen.

Mr. Bonhote deserves well of his fellows for his unstinted condemnation of the Sparrow; he very rightly concludes that the only saving feature in this hooligan among birds is the quiet beauty of colouring in country-bred males.

Touching the illustrations to this book one can only say that, whereas all are good, some are better than others. Among the most characteristic are those of the Blackbird, Redstart, Dartford Warbler, Fire-crest, Tree Creeper, Spotted Flycatcher, Magpie, the Raptorial generally and the Limicolæ. The plate of the Goldfinch shows the usual sexual characteristics and is

therefore admirable ; that of the Mealy Redpoll appears to have been prepared from Continental birds, I have never seen British specimens so distinctly marked. The plate of the Chaffinch is the least successful.

Our members will be able to see that I have not over-praised the illustrations, since the courtesy of the publishers has enabled us to use one of the plates to accompany the present notice.

In conclusion, I urgently recommend every lover of our native birds to secure a copy of this beautiful and instructive volume : he will find that his money has been well spent.

A. G. B.

---

PETS AND HOW TO KEEP THEM : with twelve coloured plates and many illustrations after photographs from life : by FRANK FINN, B.A., F.Z.S., &c. London, HUTCHINSON & Co., Paternoster Row, 1907.

This is one of the most charming and handy little volumes that we have seen for many a long day, and one calculated to be extremely useful to all who keep pets. It is not confined to one type of pet, but embraces the whole of the vertebrata : nevertheless a considerable portion of the book is devoted to birds ; not, Mr. Finn tells us, because of his individual preference for the feathered tribe, but because a great majority of the animals available for pet-keepers belong to that Class.

From personal experience we are quite able to endorse the statement that “ a captive animal, if well housed and fed, has a much better expectation of life than a wild one, and it is quite possible that in the long run it enjoys more happiness during its lifetime.”

The first fifty-nine pages are devoted to Mammals, and then come upwards of a hundred pages on Cage and Aviary, Garden and Park Birds, wherein much sound advice is given. Here and there we do not quite agree with the author's conclusions, but this must always be the case when one aviculturist compares his own experiences with those of another : it has been said that “ two of a trade can never agree,” and there is a modicum of truth in the saying, but in the majority of cases experienced bird-keepers agree remarkably well.

Personally we do not believe that milk-sop is good for

Grey Parrots at any period of their lives. Out of some six hundred cases of sickness brought to the reviewer's notice during the past nine years, about a third have suffered from vomiting, diarrhœa, and *apparent* influenza colds: in nearly every instance the malady has been traceable to the use of sop and generally milk-sop, and has been checked or cured almost immediately by a removal of the unnatural food and recourse to a dry regime.

After the Garden and Park Birds (Part III.) we come to the Cold-blooded Animals beginning with those interesting pets—the Reptiles and Amphibians for which, strangely enough, some people seem to have an unaccountable horror; yet lizards make most interesting and affectionate pets, while the harmless snakes and slow-worms are pretty and soon learn to know their owner. The book terminates with accounts of the various more popular species of fish suitable for aquaria. Altogether it is a valuable and instructive book, which all lovers of Nature would do well to add to their libraries. The plates and photographs are admirable, the natural attitudes of the animals being truthfully depicted, and where colours are given these also are true to Nature.

A. G. B.

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### BRITISH BIRDS.

The January number of *British Birds* commences with an account, illustrated by two photographs, of the breeding of the Hen-Harrier and Hobby in Surrey in 1907, by C. H. Bentham and L. B. Mouritz. The only previous record of the former bird breeding in the county appears to have reference to some young birds taken as long ago as 1842, but the Hobby has been known to nest in Surrey twice previously. Dr. C. B. Ticehurst publishes a short article on the Wood-Pigeon diphtheria; Messrs. H. F. Witherby and N. F. Ticehurst continue their account of the more important additions to our knowledge of British Birds since 1899; Mr. J. B. Nichols records and illustrates a new British bird—the Grey-backed Warbler as having occurred in Kent, and points out the characters by which it may be distinguished from the Rufous Warbler; a number of interesting Notes and two Reviews complete the number.

The *Ibis*, 9th ser. vol. II., v. 5. The January part of this journal commences with "Further Notes on the Birds of Gazaland," with map and coloured plate, by C. F. M. Swynnerton, a paper especially interesting to aviculturists on account of the full notes on the habits of the birds of that region which it contains. Another paper of a similar character is entitled "Ornithological Notes from Japan," by Collingwood Ingram.

Other articles in this part are by Percy R. Lowe, "On the Ground-Dove of Porto Rico, with Notes on the other species of *Chamæpelia*," in which the author evidently holds the same opinion as the reviewer—that the different colouring of the soft parts in these doves entitles them to specific rank.

Dr. Bowdler Sharpe has an article, illustrated by a coloured plate, "On further collections of Birds from the Efulen District of Camaroon, West Africa : with Notes by the Collector." The number concludes with Obituary Notices of Mr. Howard Saunders, Dr. Rudolph Blasins, and Professor Nation ; Notices of recent Ornithological Publications, Letters, Extracts, Notes, etc., making altogether a very useful and instructive part.

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## THE SOCIETY'S MEDAL.

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In the January number of this journal Mr. T. H. Newman recorded his success in breeding the Madagascar Turtle-Dove (*Turtur picturatus*) in his aviaries ; and Mr. W. E. Teschemaker gave an account of his success in breeding the Hedge-Accentor (*Accentor modularis*). If any member knows of the former having been previously bred in captivity in the United Kingdom, he is requested to communicate with the Hon. Business Secretary. With regard to the Hedge-Accentor, notes in our correspondence columns prove that it has been bred previously.

---

## CORRESPONDENCE, NOTES, ETC.

## THE TRUMPETER BIRD.

SIR,—I am much obliged to Mrs. Gregory and to Mr. Henry Scherren or the quotations they gave in the *Avicultural Magazine* for January, re the native name "Agami" for the Trumpeter Bird.

E. WILLIAM HARPER.

## A CORRECTION.

SIR,—In my letter on the "Trumpeter Bird" in last month's *Avicultural Magazine*, "Whitaker in his Wanderings" ought to read "Waterton in his Wanderings."

OCTAVIA GREGORY.

## BRITISH BIRDS SUITABLE FOR AVICULTURE.

SIR,—In your January number Mr. Teschemaker puts in a plea for British birds as suitable for aviculture, a sentiment which I most cordially endorse, while his further remarks are extremely practical and to the point. As I am just completing a list of our native birds that have been bred in confinement for 'British birds,' I will not attempt to enter on the matter here beyond stating that Mr. Teschemaker is practically correct in the list he gives.

As regards that delightful bird the 'Accentor,' I have frequently had this species nest and hatch in my aviaries, but I have never reared any as young, I could not afford to give them an aviary to themselves, or to supply them with a sufficiency of insect food. To the best of my knowledge Mr. Teschemaker's is the first recorded instance of the rearing of the young in captivity.

Unfortunately in the Zoological Society's Gardens, where one might expect to find records of birds that have nested, the records kept are so meagre as to be absolutely unreliable, while practically no notes on the comparatively few species they have bred are to be found either in print or manuscript.

J. LEWIS BONHOTE.

SIR,—In response to my request for information in the matter of the breeding of the Accentor in captivity, I have received a most interesting letter from our member, Mr. H. Wormald. Mr. Wormald tells me that last summer he turned ten Accentors into his Waders' Aviary (10 yds.  $\times$  8 yds.  $\times$  8 ft. high) and from these he had nine nests and reared three young birds—the remainder being killed.

No insect food was supplied.

I think there can be very little doubt that this is an easy species to breed and probably success has been frequently achieved.

Mr. Wormald also noticed the tendency of this species to become bald, but attributed it at the time to his birds having struck the netting when alarmed by Owls at night.

I am glad to hear that at least one member thinks well of my suggestion that there is much to be accomplished in the way of breeding indigenous species and that the latter are no whit less interesting than foreigners.

Altogether, Mr. Wormald's letter with some account of his Waders and some excellent sketches of the display of the Ruff has interested me greatly.

W. E. TESCHEMAKER.

The following proof of the previous breeding of the Hedge-Accentor in captivity appeared in *Canary and Cage Bird Life* for January 17th:—

In "Here and There" you ask, Have Dunnocks or Hedge Sparrows been bred in captivity? Well, I know of one instance. About 1894 or 1895, there lived on Unsworth Moor, near Darlington, a man named Brown, who was a retainer in some capacity to the Unsworth Moor branch of the Pease family. A pair of Dunnocks had their nest in the quicksets by his cottage, and the hen was so deep sitting that she would let you pick her off. Brown had a large all-wire ferret hutch, and into this he put branch, nest, and hen, and the same day he caught the cock by the simple expedient of rolling up strips of the "sticky" paper flycatcher, and thus liming him. The hen did not budge from her eggs after being taken from Brown's pocket and gently put on to them. The cock hopped about the improvised aviary quite contentedly, and later the brood was hatched, and when old enough all the lot, seven birds, including the old birds, were let free one fine autumn day. The youngsters grew quite strong and big. The old ones did not attempt to make a second nest, and all the time they were in durance they were fed on birdcage refuse, and duck food, the latter made from meal of some kind and boiled potatoes, and caterpillars from the nasturtiums and other plants in the garden. Brown had a stud of blue Canary Lizards of a deep smoke-blue colour—the only birds of this kind I ever have seen; and from the gleanings amongst the waste from the cages of these birds, it is possible the Dunnocks were able to pick up quite a goodly proportion of seeds. They always looked well, anyhow.—EDWARD WILLIAMS.

#### FOOD FOR LORIES.

SIR,—Those who may prefer to have a wrinkle gratis, to buying their experience, may be glad to know of a food I have always found perfectly satisfactory with lories.

Take dried fig and pour boiling water over it. Do the same with bun: strain the bun. Take the fig and mash it up with double the quantity of soaked bun.

They will find this will keep *Eos* and *Lorius* in perfect health.

I have never had *Chalcopsittacus* or *Dasyptilus* or *Charmosyna*, but I see no reason why it should not succeed with them.

I have never found milk suit any parrot except Macaws: but I believe Mr. Goodfellow brought over lorries on tinned milk.

I admit that the food I recommend makes them dirty birds to keep, and I should prefer to feed them on seed, if it suited them.

I have no doubt that seed is the best for Blue Mountain Lories, and if so, I do not see why it should not be best for the other species of *Trichoglossus*.

F. G. DUTTON.

### SEPOY FINCH EATING ITS YOUNG.

SIR,—My Sepoy finches (*Bird Notes*, volume V., May 1906) nested and hatched out two or three. You can judge of my horror when, passing the aviary one morning, I saw the hen with something in its beak that looked like a young bird and which she was deliberately pecking and eating, evidently enjoying it.

I examined what was left of the poor little finch; it was only a few days out of the shell. Is not this unusual?

Plenty of mealworms, dried flies and ants' egg were placed in the aviary every morning. What would you advise as a preventive next time if I have any luck?

The cock birds appear rather delicate when changing colour.

C. CASTLE-SLOANE.

I was unable to suggest a remedy for this cannibalism, which appears in one form or another in many species. *Carpodacus* with its fugitive rose-red colouring is probably more nearly related to *Linota* and *Serinus* than to *Pyrhula*. The call-note of *C. roseus* is certainly remarkably like that of the domesticated Canary.

When I used to breed Canaries, on more than one occasion I have known the hens to eat their young when two or three days old. *Cardinalis* also has been known to brain its young and throw the bodies out of the nest.

Many years ago an account was published in the *Zoologist* of a Missel Thrush which partly fed its nestlings upon the new-born bodies of Song-Thrushes which it first picked to pieces, and Princess Croy, who bred the Scarlet Tanager at Hainaut, Belgium, notes that the parent birds partly fed their young upon the bodies of newly-hatched Wagtails. I have also recorded the fact that Manyah Weavers and Pekin Nightingales both took toll of my young Saffron-finches, though the latter more often ate the eggs than the young.

Of course we can all suggest that insufficient insect-food is the cause of this unnatural behaviour on the part of Finches; but is it? It is by no

means a rare occurrence for hen Canaries to bite off and eat the wings and feet of their naked young, and Canaries are not great insect-eaters; even in their wild state it is probable that they only eat small caterpillars and aphides.

The question to my mind is whether the Sepoy-finches may not have required earthworms to help them in feeding their young. I noticed that my Pine Grosbeaks ate worms with eagerness and avidity, and although it may seem odd that finches should eat these slimy things, it must be remembered that doves also, which one would not naturally credit with such a tendency, are equally eager for them.

A. G. BUTLER.

## POST MORTEM EXAMINATIONS.

### RULES.

Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lauherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, *and a fee of 1/- for each bird.* If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons, and Canaries can only be reported on by post.

1, AMADUVADE; 2, LOVEBIRD; 3, CUTTHROAT. (J. R. DRUMMOND HAY).

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CORDON BLEU. (John Bowes). Liver disease of long standing was cause of death.

DIAMOND SPARROW. (Chas. Dell.) Your bird died of acute enteritis.

CRIMSON-WINGED PARRAKETT. (Lady Morshead). Your bird died of syncope from weakness caused by chronic indigestion and consequent malassimilation of her food.

*Answered by Post:*

Lenox C. Arbuthnot.

Mrs. Currey.

ARTHUR GILL.



### III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

#### NEW MEMBERS.

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 Dr. GEORGE M. CREEVEY; 40, East 63rd Street, New York City.  
 Mr. R. H. R. BROCKLEBANK; 9th (Queen's Royal) Lancers' Cantonments,  
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 Mr. F. HESKETH; same address.

#### CANDIDATES FOR ELECTION.

- Mr. J. J. MANSON, L.D.S., 127, Canning Street, Glasgow.  
*Proposed by Miss PRIDDIE WADDELL.*  
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- Mr. H. C. OBERHOLSER; to 144, Gerard Street, N.W. Washington,  
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 Mr. W. E. RENAUL; to 17, Emmanuel Avenue, Friar's Park, Acton, W.  
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## THE JOURNAL OF THE AVICULTURAL SOCIETY.

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*All MSS. for publication in the Magazine, Books for Review, and Private Advertisements* should be addressed to the Editor, *pro. tem.*, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent.

*All Queries respecting Birds* (except *post mortem* cases) should be addressed to the Honorary Correspondence Secretary, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent.

*All other correspondence, and Subscriptions*, should be sent to the Honorary Business Secretary, Mr. T. H. NEWMAN, Newlands, Harrowdene Road, Wembley, Middlesex. Any change of address should be at once notified to him.

Advice is given, *by post*, by members of the Council to members of the Society, upon all subjects connected with Foreign and British birds. All queries are to be addressed to the Hon. Correspondence Secretary and should contain a penny stamp. Those marked "Private" will not be published.

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Vols. I., III. & IV., are out of print. Second-hand copies sometimes reach the Publisher, to whom application should be made.

(Continued on page iii. of cover).





Photo, by W. S. Berridge.

EGYPTIAN PLOVER OR BLACK-BACKED COURSER.  
*Pluvianus ægyptius.*

# Avicultural Magazine,

BEING THE JOURNAL OF THE  
AVICULTURAL SOCIETY.

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New Series—VOL. VI.—No. 5.—All rights reserved.

MARCH, 1908.

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## THE EGYPTIAN PLOVER.

*Pluvianus ægyptius.*

ITS NAME, DISTRIBUTION, KNOWN AND REPUTED  
HABITS.

By CAPT. STANLEY S. FLOWER.

The beautiful bird whose photograph by W. S. Berridge is published in this number of the *Avicultural Magazine* was first made known to science by the energetic young Swedish naturalist, Frederick Hasselquist, who visited Egypt from May 1750 to March 1751. Travelling in Egypt in those times was neither easy or pleasant. Poor Hasselquist had the greatest difficulties to contend with, he said it was like doing penance for crimes, and on his return journey, after a long illness, he died at Smyrna, 9th February, 1752, when only thirty years of age. His former instructor, the great Linnæus, published Hasselquist's *Iter Palæstinum*, in 1757, and in this work and his later *Syst. Naturæ*, gave the bird the names *Charadrius ægyptius* (or *ægypticus*).

Vieillot proposed the generic name *Pluvianus* in 1816, and, though some authors have used other names, the bird is now almost universally called *Pluvianus ægyptius* (Linnæus).

In English it is called the Egyptian Plover, the Black-backed Courser, the Rain Plover, the Crocodile Bird or the Black-headed Plover, which last name was applied to the bird by Latham, as long ago as 1785.

Buffon called it "Le Pluvian," in 1781, and its modern French appellation is "Le Pluvian d'Égypte."

In German it is called "Der Krokodilwächter."

Various authors state that it is called in Arabic "Ter el temsach," or "Crocodile Bird;" this is probably a translation into Arabic at European suggestion, and not a name of genuine native origin.

Essentially an African bird, the Egyptian Plover is found from Angola to Senegambia in the West and along the Nile valley in the East; it has also occurred in Palestine and other Mediterranean countries, and is said to have strayed as far North as Sweden.

According to all authorities, the Egyptian Plover is common in Egypt from the Delta southwards; in the latest book on Egyptian birds, Lady William Cecil's *Bird Notes from the Nile*, (1904) page 86, this species is said to be "Very common, specially in Upper Egypt." That it does occur in Egypt is amply proved by specimens in many collections,\* but it appears to be not so very common nowadays; in nine years residence in the Nile valley I have never seen this bird in Egypt, though I know it well in the Sudan, and Mr. M. J. Nicoll tells me he has never seen it in the sixteen months he has spent in Egypt.

The most Northerly point I have met the Egyptian Plover at, is Abu Hamed, from there past Berber, Atbara, Shendi and the Shabluka gorge to Khartoum, I have seen it all along the Nile, and as far South as the sudd-country of the Bahr-el-Gebel and South-West at lake Ambadi in the Bahr-el-Ghazal, but it is on the Blue Nile that I have found it most numerous. Three times: once in the beginning of the rainy season, June-July; once near the end of the rains, September; and once in winter, November-December; I have been along the Blue Nile from Khartoum to Roseires (about 380 miles) and back, and at each season of the year have all along this stretch of river, daily seen *Pluvianus aegyptius* in large numbers, on banks and islands, flock after flock, sometimes I have counted forty to sixty Egyptian Plovers in one flock; although often seen alone, they more frequently congregate in flocks with the Spur-winged Plover, *Hoplopterus spinosus*, and also with the Stone-Curlew or Thick-knee, *Edicnemus senegalensis*.

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\* My father, the late Sir William Flower, collected specimens opposite Gebel Abufayda, 27th January, and near Sohag, 3rd and 4th February, 1874.



Seebohm in his *Geographical Distribution of the Charadriidæ* (1887) page 248, under *Variations*, writes:—"Examples from West Africa appear to be slightly smaller than those from Egypt, the former varying in length of wing from 5'0 to 5'1 inches, and the latter from 5'2 to 5'5 inches." I do not know if this difference has been corroborated by later authors: the only skin by me as I write, from Roseires, Blue Nile, has the wing a full 5'5 inches in length.

Both in colour and markings, the Egyptian Plover is, to my mind, one of the most charming of birds, a combination of a most beautiful pale, clear, bluish-grey on the upper surfaces and a lovely shade of buff on the lower, with strongly defined intense black and pure white on the head, neck, back, wing quills and end of tail feathers. The black band which divides the neck from the body is very well shown in Mr. Berridge's photograph. The white line on each side of the head which passes over the eye is continued into long, hanging, white plumes on the neck, these "ear-tufts" are reminiscent of those of the Demoiselle Crane in miniature, but in the Plover they meet on the back of the neck. The bill is black, except for a pale grey spot below the base of the lower mandible (clearly shown in the photograph). The legs are bluish-grey. Elegance and daintiness characterize the Egyptian Plover in colour, form and movements.

Its favourite haunts are the banks and islands of the river, whether these be of sand, mud or rocks I have seen it almost equally abundant. It usually flies very low over the surface of the water, crying shrilly as it flies. Its cry has been rendered "tschip, tschip, troït." It is an extremely tame and confiding bird. Mr. A. L. Butler in his excellent paper on "The Ornithology of the Egyptian Soudan," published in *The Ibis* for July, 1905, writes of the Egyptian Plover: "Though very seldom leaving the margin of the river, it will sometimes take to frequenting a native village a few hundred yards inland. It then becomes more than usually fearless, tripping about the spaces and 'zaribas' among the tethered goats, or standing on the roofs of the mud-buildings within a few feet of a passer by." I have also noticed this, and seen Egyptian Plovers feeding among domestic poultry in the

yard of the guard house near the Atbara bridge, and as little disturbed by one's walking among them as were the "barn-door" cocks and hens.

Von Heuglin in his account of the Egyptian Plover "*Ornithologie Nordost-Afrika's*" (1873) page 976, apparently doubts the usually accepted opinion that this bird buries its eggs in the sand and says that he himself always found them lying free, but Seebohm "*Geogr. Distr. Charadriidæ*" (1887) pages 250-251, confirms the account of Brehm by the very interesting observations of Captain Verner and Lieutenant G. Verner made in the Sudan, during the Nile Expedition of 1884-1885, making it an established fact that this bird does bury her eggs. Which has again been substantiated by A. L. Butler in his recent paper referred to above, whose account should be read by all interested in the subject. And Mr. W. G. Percival in the *Avicultural Magazine*, July 1906, page 297, records finding "a three-parts-grown" Egyptian Plover hidden under about a quarter-of-an-inch of sand on an islet at the mouth of the Atbara River.

It should be noted that while Heuglin gives the number of eggs in a clutch as two, which was the number found by Butler, Captain Verner twice found three eggs in a clutch.

The Egyptian Plover is perhaps most widely known from its reputed habits which have given it the name of the Crocodile Bird. The old story as given by Herodotus is that the crocodile "has the inside of its mouth constantly covered with insects that suck its blood; all other beasts and birds avoid it: while with the Trochilus alone it lives at peace, because this little bird renders it a great service; for the crocodile when it leaves the water and comes out upon the land is in the habit of lying with its mouth open facing the western breeze; at such times the Trochilus goes into the crocodile's mouth and devours the insects it finds there, and the crocodile, recognising this, does the bird no harm." While Pliny writes "When the crocodile has eaten it goes to sleep on the banks, when a little bird, known in Egypt as the Trochilus, and in Italy as the king of birds, in order to obtain food, invites the crocodile to open its jaws, then, hopping to and fro, it first cleans the outside of its mouth, next the teeth, and then inside, when the crocodile opens its jaws as wide as

possible, on account of the pleasure it experiences from the titillation. It is at these moments that the ichneumon darts down its throat and eats its way out through its belly."

Two questions must be considered: first, does any bird really do such a thing? Second, is the "Trochilus" the bird now known as the Egyptian Plover.

In Newton's "Dictionary of Birds," (1894), page 733, a foot-note is given to this subject; the first question Newton seems to have taken for granted, and as to the second after stating that various authors identify the Spur-winged Plover *Hoplopterus spinosus* as the true "Crocodile Bird" he considers that "the balance of scientific opinion is sufficiently declared" in favour of *Pluvianus ægyptius*.

In Anderson's "Zoology of Egypt, Vol. I., Reptilia and Batrachia," (1898) the subject is fully gone into on pages 18 to 23, and the literature bearing on it from the earliest times quoted. Anderson clearly proves that the bird identified by Geoffroy St. Hilaire as Hasselquist's *Charadrius ægyptius* was not our Egyptian Plover, but was probably the Little-ringed Plover *Aegialitis curonica*.

Personally I have carefully watched many hundred Nile crocodiles, small, medium, and large-sized, basking on shore, I have seen many birds, Herons, Storks, Ibises, Spoonbills, Geese, Ducks, Plovers, and Wagtails, close to and among the sleeping reptiles, but never yet have seen a bird try to enter a crocodile's mouth or pick food from it. It may possibly occur, but from my knowledge of the habits of reptiles I would agree with Dr. Anderson that a crocodile would not refrain from closing its jaws on a bird that entered its mouth, even out of consideration for any service the bird might be rendering it by catching vermin or cleaning its teeth, and as Anderson writes, "The probability is that if any particular species of bird has the habit, many an individual has lost its life by so doing." It is highly improbable that a bird would come out alive from the once closed mouth of a crocodile, and as it could not feed inside when the crocodile's mouth was shut the *raison d'être* of the manœuvre popularly believed in is hard to follow.

It should be noted that A. L. Butler in his paper referred

to above, page 395, records having once seen a pair of Spur-winged Plovers, *Hoplopterus spinosus*, "pecking something from a basking crocodile's head."

On whether the subject of this article was known to the ancient Egyptians I am not qualified to write, I do not remember having so far seen it represented in their paintings. As the opinion of the late Dr. Anderson on this point is recorded in his volume on Reptiles it may have escaped the notice of many ornithologists, so may well be quoted here.

"Brehm, Heuglin, Dresser, and others have said that *Pluvianus aegyptius* is U in the hieroglyphic alphabet of the Egyptians, and it is even stated that the Egyptians of old were well acquainted with it, and that it frequently occurs on wall-paintings. I have gone carefully through the literature bearing on the wall-paintings of Egypt, but I have not been able to find a single representation of *Pluvianus aegyptius*. The U of the alphabet is unquestionably a newly-fledged domestic chicken, a most important bird with the Egyptians, who, as now, largely if not exclusively brought all their poultry to life by artificial incubation. The wings devoid of quills, the absence of tail-feathers, and the generally imperfect character of the feathering of the bird of the hieroglyph U are all distinctive of a bird that has left the egg. By some Egyptologists I believe the figure has been taken for a quail."

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## NOTES ON MY BIRDS.

By ROSIE ALDERSON.

(Continued from page 130).

The other inmates of this aviary are a pair of Bronze-necked Doves and what I hope are a pair of rare Black-bearded Doves; there is also a tiny "Francisian" Dove from South America, a pretty little thing about the size of a Passerine.

The Bronze-necked cock was sent to me with a hen from Australia. They were most unsuitably packed. The two Bronze-necked, a large Black and White Fruit Pigeon and a Blue-bonnet Parrakeet all being sent together in one small box-cage, only about 17 inches square.

Of course, the result was that the Bronze-necked, being the weakest, suffered, and had it not been for the kindness and sense shown by the ship's butcher (who had charge of the birds) I should have lost the Bronze-necked Doves altogether. He separated the birds on the voyage, but, in the case of the hen Bronze-necked, it was too late. When she arrived, I found she had sustained a most terrible injury, the eye and right side of the face was entirely gone, just as if it had been sliced off. The bird could still get about, but the wound, which seemed to have healed once, broke out afresh. I think the brain was affected, and after lingering for a time, the poor thing died. The cock, too, had not escaped uninjured for he had a wound over one eye, and the place even now after many months is still there, and never really goes, although the bird seems healthy and strong. Their ill-fortune seemed to pursue the poor Bronze-necks; for the cock a short time after he came to me, had the misfortune to get his leg broken by a small Cactus Conure. The whole thing was really a misunderstanding, the Conure settled near the Dove, who, thinking it was going to be attacked, raised one wing high above its head, as Doves will when on the defensive. The Conure seeing the raised wing, and thinking it meant mischief, thought that at any rate he would get the first blow in, so snapped at the Dove's leg and broke it right up the thigh, leaving the leg dangling and only held by a piece of skin.

The groom (who looked after the aviaries) held the bird whilst I bound up its leg, using a wooden match for a splint, with some cotton wool, tape and thread. After a time, the leg set, and now is quite strong again, but unfortunately I did not set it quite straight and in consequence the leg sticks out a little. After the death of the hen, the cock grew very miserable, and used to sit huddled up on a perch taking no interest in anything. Some time after, I managed to secure another hen, and the joy of the poor lonely bird was a pleasure to see. The change in him when he saw the little hen was just magical. Before he saw her he had looked the picture of woe, now, in a moment, he was transformed and commenced bowing and cooing with delight. The love, however, is nearly all on his side, the hen puts up with him, but little more. I think myself she is

rather disappointed at coming right across England only to find a lame husband, and further the defect over his eye quite spoils the beauty on that side of his face, and he cannot always turn the perfect side towards her. The cock is really not handsome enough to suit her taste, but he does not at all realize this. He is beginning to be anxious to nest and is becoming rather a nuisance to the other inmates of the aviary, especially to the Black-bearded Doves who are too lazy and fat to resent him. The cock Bronze-necked goes into a nest basket and coos, then the hen taking no notice, he descends and starts bowing and cooing, spreading his tail in an upright fan and bobbing up and down, to the astonished Black-bearded Doves, the hen Bronze-necked meanwhile seeming quite indifferent. The Black-bearded Doves are very handsome birds, and I have never seen any like them. Three specimens were sent to me privately a few years ago by a gentleman living in Jamaica. They were fairly common there though almost unknown in England, but the terrible earthquake destroyed so much bird life that, for anything I know to the contrary, these Doves may be rare now in their native land. In shape the Black-bearded are rather larger and heavier than a Bleeding-heart Pigeon. They are strong looking birds, and keep much on the floor of the aviary; though they seem lazy by nature and do not move about much. My third bird, who died, got very thickened legs (almost like scaled legs in fowls), and Mr. Newman made the suggestion to me that possibly it was caused by the birds not having grass to walk on, and the aviary tiled floor being too hard. I took his advice and turned the remaining two doves into another aviary with a grass flight, and here their legs became wonderfully improved, and further, one bird that had moulted out a lot of white feathers (instead of maroon as they should have been) gradually lost all this, and became its proper colour again. The whole of the body of these doves is a rich brown maroon becoming lighter on the breast, the top part of the head (like a cap) being bright cobalt blue. The face is sharply lined with white rather like a cock Californian Quail, and under the chin is a beautiful bib of dark blue metallic feathers from which I suppose the bird gets its name. The beak

is pale grey at the tip, but scarlet near the face, and it is this little bit of bright red against the blue cap that makes the bird look so striking. I believe the two birds I have left are a true pair, for one is larger and bolder looking than the other, but they are so solemn and self-contained it is hard to say. One—the larger one—coos, so he is evidently a cock bird, but the sex of the other I cannot be quite certain of. I believe in Jamaica these birds laid on the ground (they had been kept in an aviary) but with me they have never laid at all. I have tried them now one or two seasons with no success under different conditions, but I live in hope I shall some day find out what they really want. Last season I put them in a low duck house with a wire run in front filled with long rank grass, and this I partially screened over to give them a quiet corner in which I hoped they would nest. Further, I put a sod of grass in the shut-off shelter in the duck house. But all my hopes came to nothing, and I had the further disappointment that in moving out the birds to their winter quarter (for they are not quite hardy) I let one escape. It flew right away with a strong and swift flight and I gave it up for lost. I went down to the police station and saw about some handbills offering a reward being got out, for once before I got a lost bird back by advertising; and then I ran the remaining dove into the wire-fronted duck house and having fastened it off, so that it could not get out but would act as a decoy, I left the door of the flight open and put a pot of food just inside. Next morning the lost bird came back of its own accord, and it was so hungry and so pleased to see its mate that it was easily captured with some grain placed in a trap cage. I was very glad to get the bird back for, apart from its rarity, it might have died of cold or hunger or might have been shot, and I could not have easily replaced it, and keeping an odd bird is not very satisfactory.

In the larger half of this heated aviary there is little, if anything of special interest to tell you of, save six Bleeding Heart Pigeons. I have a great weakness for these quaint doves, with their slate-grey bodies, the wings barred by a deeper shade, and iridescent neck of purple opal, white breasts, and a bright red blood splash in the centre that gives the bird its name. Bleeding Hearts love each other's society and the little flock of six keep

altogether, and a very pretty picture they make. I have never seen two Bleeding Hearts *quite* alike, they may look so to a casual observer, but to an owner they are each a little different; just as they say no two sheep in a flock are alike. In one bird the "heart" will be a little larger, in another perhaps smaller, a third bird has longer legs, in a fourth the grey on each side of the breast nearly meets at the throat. Bleeding Hearts are very restless birds keeping on the ground and walking to and fro perpetually; they seldom go into the branches save to roost at night. When the cocks coo they throw themselves right back, almost resting on the tail, and puff out the breast and "heart" to quite an imposing size. It is a study in itself to see the different attitudes doves assume when cooing. If you watch them you will notice they always display the gayest part of their plumage. One will bare the head to show the neck, another spread the tail and wings fan shape, or, again, lean backwards like the Bleeding Heart. These doves get very tame if coaxed with some special tit-bit, and I believe would soon learn to feed out of one's hand. They are especially fond of mealworms (though many are not good for them) and, like most of my doves, like ground biscuit and ground monkey nuts. I have bred the Bleeding Heart before now and the young ones are very pretty little things: soft chocolate brown in colour, with buff bars across the wings and just a tiny red line down the breast to show you where the "heart" is coming by-and-bye. To be successful in breeding Bleeding Hearts you must only put one pair in each house. They live happily together in numbers, but when more than two are in an aviary they seem to lose the desire to start nesting seriously.

Besides these doves I have a quantity of little birds in this aviary, but nothing of special interest, except perhaps a little Cactus Conure, whose quaint postures and grimaces always amuse visitors. He will eat from my hand, but is rather lonely, for he had two companions and these are both dead, and they were a most devoted trio. "Jock," the remaining bird, is always demanding attention, and if he can get anyone to talk to him and notice him he is wild with delight, but he is rather treacherous and will bite your finger quite as readily as he will take your biscuit. As a rule his temper is merely show, but once or twice



when he has taken a dislike to a bird he has become dangerous, so I always have to be on the watch to prevent accidents. Of the inhabitants of my two other aviaries I must tell you another day.

(*To be continued*).

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## THE TROPICAL SEED-FINCH.

*Oryzoborus torridus.*

A specimen of this rare little finch was sent to me by Mr. E. W. Harper on November 28th, 1907. It is of about the same size as the Black-headed Mannikin; and, looking at it from below, one might almost fancy that it was a near relative of that species, but the generally silky black colouring of the upper surface with white speculum and bend of wing do not bear out the illusion.

Although rarely imported this bird has been represented in the London Zoological Society's collection since 1860, but in Germany it has only occasionally appeared singly or in pairs in the market.

Dr. Russ, who apparently never possessed the species himself, observes that it has not yet been bred, and altogether he regards it as not particularly interesting; I notice that he very frequently says this respecting birds of which he has had no personal experience. He tells us that Mr. von Schlechtendal, who obtained two pairs from the dealer Möller, writes that "they are quiet, peaceful little birds. They despise mealworms, green food and fruit, feed solely upon all kinds of seed, and live entirely without song or sound." He says that when removing a sickly specimen to another cage it bit him painfully with its powerful pointed beak.

Mr. Harper tells me that this account is not correct; as both *O. torridus* and *O. crassirostris* eat lettuce, and the latter at any rate, eats mealworms, or that is his impression. When I removed it from the travelling cage in which it reached me, to transfer it to the flight-cage in which it now is, it never attempted to bite me; but perhaps Mr. Schlechtendal handled his bird a trifle roughly and it naturally retaliated.

Whether this bird is really mute, I cannot at present say definitely, as I have three *Spermophilæ* with it ; but the day after it reached me I heard what I believed to be the Tropical Seed-Finch utter a note which sounded like *whit zizi* : I never yet heard any *Spermophila* produce a note of the kind to my knowledge. That it is quiet and peaceful in a flight-cage is certainly true ; but whether a pair in a good-sized aviary would be equally amiable remains to be proved.

Little seems to have been recorded respecting the wild life of *O. torridus* ; Burmeister says that it is more at home on open commons than in the vicinity of forest, and that is about all that appears to be definitely known of the species in freedom ; but the much larger *O. crassirostris* builds in low bushes, forming its nest of coarse grass-stems, with a lining of finer grass ; it lays two eggs, possibly more at times, of a mottled greyish-brown colour blotched with lilacine grey and irregularly blotched and streaked with dark red-brown. It is not improbable that *O. torridus* would resemble the larger species somewhat in its nidification.

Dr. Sharpe places *Oryzoborus* among the Grosbeaks between *Guiraca* and *Loxigalla* ; but Professor Ridgway says of *Oryzoborus* and some others " they are ' grosbeaks ' " so far as the large size of the bill is concerned, though not otherwise, for there is very great difference in the form of the beak between such genera as *Pheucticus*, *Zamelodia*, *Geospiza*, *Oryzoborus*, *Cardinalis*, etc., and that of *Hesperiphona*, *Coccothraustes*, etc., not to mention radical differences in other respects. He defines no Sub-families, but places *Oryzoborus* between *Cyanocompsa* and *Guiraca*.

Both of these leading Systematists therefore seem to agree that *Oryzoborus* is related to *Guiraca*, though *O. torrida* with its prominent white speculum and its modest colouring, as well as in the general outline of head and beak seems nearly to approach *Sporophila* (*Spermophila* of the Museum Catalogue). *Cyanocompsa* is a genus proposed by Cabanis for *Cyanoloxia parellina* (*Guiraca parellina* of Sclater) and includes several species referred by Dr. Sharpe to *Guiraca* ; so that, according to Ridgway *Oryzoborus* must be very nearly related indeed to the *Guiraca* (Blue Grosbeaks) of the Museum Catalogue.

I should be glad if other members of our Society who have kept *Oryzoborus* could give us some definite information respecting its behaviour in captivity, whether it really is destitute of both call-note and song and whether it does despise mealworms or other insects. It seems inconceivable that any finch should be entirely non-insectivorous: I believe that even those Grass-finches which feed upon seed only in their normal condition, eat aphides when rearing their young—if they can get them.

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## RED-BREASTED STARLINGS, ETC.

By Dr. A. G. BUTLER.

The theory of protective assimilation is doubtless well known to the more scientific members of our Society; but, for the benefit of those not acquainted with it, I may briefly summarize it as follows:—

It is believed that some animals owe their very existence to the fact that, at some stage of their development, they produced certain varieties which tended to resemble more favoured species; that is to say, species which were powerful enough to defend themselves, were immune from destruction because of their offensive odour, or some other unpleasantness; or to the fact that their form or colouring rendered them difficult to distinguish from their surroundings. This tendency in the desired direction having been, to a slight extent, protective, some of these slight variations survived to perpetuate the new type, which gradually improved in its resemblance until eventually it became almost perfect: the harmless and tasty creature was passed over in mistake for the dangerous and offensive one, or because of its close resemblance to its natural surroundings.

That the truth of this state of things is borne out in many instances throughout the animal kingdom cannot be questioned: one of the most striking instances of environmental protection being seen in the case of the Weavers of the genus *Pyromelana*, the females of which are always protected by their Sedge-Warbler-like colouring, rendering them inconspicuous among reeds or coarse grasses, while the male only assumes his marvellously showy dress during the breeding-season, at a time when

he is extremely combative and aggressive; and reassumes the sober protective dress immediately afterwards.

It is an amusing sight to watch the assurance with which a male of *Pyromelana oryx* when in full colour will puff out all its fiery orange feathers and dash at a bird of ten or twenty times its own weight, driving it in terror from pillar to post: after its moult, however, *P. oryx* is quite subdued; or, if at times it struts up to a bigger bird for a moment, the latter only has to stand its ground and open its mouth to reduce it immediately to subjection.

Many instances of resemblance between powerful and weakly birds have been recorded by Dr. A. R. Wallace; one of the most curious perhaps being that of a Sparrow-hawk (*Accipiter pileatus*) which, in Rio Janeiro assumes the plumage of a local hawk (*Harpagus diodon*) of insectivorous habits, with the advantage to itself of seeming harmless to the small birds upon which it feeds, and thus approaching to within striking distance.

Numerous ground-frequenting birds are so coloured upon the upper parts that they resemble the surrounding surface upon which they walk, many of them however are most brilliantly coloured on the under parts and seem to be aware of the danger to themselves which would arise if this conspicuous colouring were revealed to an enemy; inasmuch as, at the slightest alarm, they crouch down and do their utmost to conceal it.

A very good instance of this is to be seen in the Military Starlings of South America with their black-streaked brown upper parts, and mostly scarlet under parts. When alarmed they crouch close to the ground with the breast and throat pitched forward so as to conceal the scarlet as much as possible. Hudson tells us that Defilippi's Military Starling when migrating southwards at the approach of the cold season moves over the ground in a vast flock, consisting of from four or five hundred to a thousand individuals, and suggests the idea of a disciplined army on its march. One would have supposed that this would have been the time when they would be most liable to the attacks of birds of prey, but possibly they might unitedly attack an enemy, and then their long bills attacking from all sides would scare him away.

The Military Starlings appear to be extremely common

birds, and oddly enough they are exactly copied, not only in the colouring of both surfaces, but in some of their habits by the species of the genus *Leistes* (Marsh-Troupials). So close is the resemblance between *Leistes superciliaris* and *Trupialis defilippii*, that, if it were not for the shorter broader finch-like beak of the former, it might almost be mistaken for the Military Starling. Both birds crouch in the same manner when alarmed, and fly recklessly and irregularly upwards, singing their fearful song, when courting.

Now what has often puzzled me is to discover what possible advantage the Red-breasted Marsh Troupial can gain by its resemblance to Defilippi's Starling: I can discover none whatever. Moreover, if there be an advantage and we assume that *Leistes guianensis*, in like manner, formerly copied the colouring of *Trupialis bellicosa*; why is it that these two birds now inhabit different regions? Is not this of itself a proof that they can get along perfectly well independently of each other? If so, why are the species of *Leistes* so like the species of *Trupialis*? It is not only in birds that cases of this kind occur; for, among butterflies also, whole series of related genera can be arranged in parallel rows of species each resembling the other in colouring; none of them apparently needing to resemble the others, because all are alike noxious and distasteful to insectivorous animals.\*

It has been suggested that the resemblance of many genera to each other impresses their objectionable character more forcibly upon their enemies, and thus they are less liable to be maimed by young and inexperienced creatures seizing them; that one suffers for the many, and so the latter escape unharmed: a view which has always seemed to me far-fetched and improbable, when one observes the exactness with which all the patterns in a genus are repeated in half a dozen others, as well as in other unrelated, palatable, and palpably mimicking genera.

Surely it is more reasonable to suppose that colouring is developed in certain fixed directions and that, when not injurious to an animal, it may be retained long after the structure has been modified; and the tendency to variation in the same lines may, in like manner, be retained.

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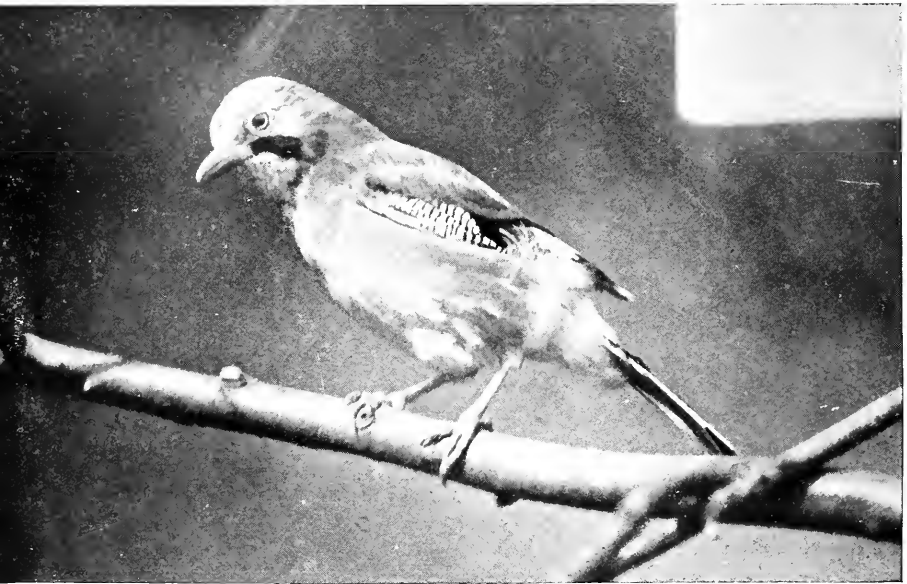
\* The *Ithominae*.

In spite of the total dissimilarity of their bills, it is evident that Ridgway regards *Trupialis* and *Leistes* as still nearly related ; if so their divergence from a common ancestor may have been comparatively recent in the unthinkable ages of avian evolution ; and I see no more difficulty in the retention of a certain type of colouring for a million years than for ten thousand, provided that it is suited to the conditions of its wearer.

I feel certain that many supposed instances of what has been called mimicry are nothing more than inherited resemblances between genera which had a common origin, some of which like *Trupialis* and *Leistes* have inherited also certain similarities in habits.

Nature has not a free hand in the development of colour, although her resources seem to be unlimited : for instance, one cannot believe it possible for a blue species to be developed direct from a yellow ; I believe the colouring must either pass through the black stage, or else be gradually modified from yellow through orange, crimson and purple as in the rainbow. We constantly find tawny, black and yellow in a single individual ; blue, black, green and yellow ; tawny, black and crimson, and so on ; but in a single instance which I recall in which yellowish-white, bluish grey and blood red species occur in one genus, there is some trace of black remaining, and a smoky brown type in a transition stage between the dissimilar colours : I think it is true in this respect, if not in all, that *Natura non facit saltum*. As black is a combination of all colours, we may conclude that it is capable of producing them all : on the other hand white, being the absence of colour, should be capable of producing none. When therefore white changes to yellow, we must conclude that it reverts to a previous condition. Blue seems to be the first colour produced from black, and when one sees a pale blue belt in conjunction with a white one, there is pretty certain to be black close to it, and often at the extremities of the blue belt. But I fear I am wandering somewhat from my point, which was to show that similar types of colouring are to be expected in related forms, inasmuch as Nature works most smoothly in the direction of the least resistance.





JAY.

*Garrulus glandarius.*



HILL-MYNAH.

*Eulabes intermedius.*



If this sort of article seems dry to our members they must come forward and help with something more strictly avicultural. I should be far better pleased with practical papers myself.

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## NOTICES OF NEW BOOKS, ETC.

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The plate published herewith represents two of the photographs published in Mr. Finn's book, noted at p. 132.

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### BRITISH BIRDS.

The February number of *British Birds* includes an illustrated paper by Mr. Ogilvie-Grant "On two supposed hybrids between Red Grouse and Ptarmigan, the first were killed at Kinloch Rannoch, Perthshire, in September, 1907, the second on Malundy, 3,293 ft., Monar Forest, Ross-shire, in November, 1874. Next comes an article entitled "Notes on the habits and distribution of the Cirl Bunting, in North Wales," by S. G. Cummings; Messrs. Witherby and Ticehurst continue their valuable paper on the more important additions to our knowledge of British Birds since 1899; Commander H. Lynes, R.N., describes "An incident in the southward migration of the Swallow"; various notes and letters follow, and the number concludes with a critique (it is hardly correct to call it a review) of Mr. Bonhote's "Birds of Britain."

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Messrs. Witherby and Co. announce the approaching publication of a book by Mr. M. J. Nicoll, giving an account of three long voyages on the Earl of Crawford's yacht "Valhalla."

The author, who is a well-known ornithologist, describes the bird and other animal life of many islands seldom or never previously explored.

The collections made by Mr. Nicoll during the voyages have been presented by Lord Crawford to the Natural History Museum, of which his lordship is one of the trustees.

The book will be fully illustrated from photographs taken during the voyages.

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We have received from Messrs. Trower, the well-known Bird-food Specialists of the Caledonian Road, London, a very useful little sixpenny pamphlet entitled "The Bird-Keeper's Guide": by Allen Silver and T. R. Trower.

The object of this treatise is to provide the beginner in the study of bird-life with a handy and concise text-book for reference; so that whenever he becomes the possessor of a bird he may learn therefrom the type of cage most suitable to its requirements, the best food for it, its merits as a songster or exhibition bird, whether it is most satisfactory when hand-reared or caught wild.

Both trivial and scientific names are given, as well as the habitat of each species. The different items of information are arranged in parallel columns.

In the case of the foreign birds the scientific names not infrequently and the popular names occasionally are not quite correct: the Slender-billed Cockatoo being called "Nosicus!" a name probably given in jest by some humorous dealer as a translation of the name *nasicus*, though *nasica* is more correct. The nosy appearance of the bird seems to have struck Latham, as of course it did the author of the scientific name.\*

Mr. Silver has had a good deal of experience in keeping British birds and has also kept a few foreign species; he has not however relied solely upon this, but has been more or less guided by the opinion of others: the consequence is that this little pamphlet is remarkably trustworthy.

## JANUARY MEETING OF THE COUNCIL.

The winter Meeting of the Council took place (by kind permission of the Zoological Society of London) at 3, Hanover Square, W., on January 29th.

The Balance-sheet for the year ending Oct. 31st, 1907, was produced and passed.

The following addition to the rules was proposed by the Duchess of Bedford and seconded by Dr. A. G. Butler:

\* Among the misspelt Greek and Latin names we find *capistrata*, *Rhamphocallus*, *Lagonestica*, *paridisca*, *cuculata*, *lutela*, *pagodorum*, *pilatus*, *Aprosinetus*, etc.

“If any Member of the Council does not attend a Meeting for two years in succession, the Council shall have power to elect another Member in his place.”

It was suggested that the sphere of usefulness of the Magazine might be increased if articles were published dealing with the general management of different groups in confined spaces, which could be republished in pamphlet form for the benefit of future Members. Before undertaking this we should be glad to receive the opinion of Members on the subject.

T. H. NEWMAN,

*Hon. Business Secretary.*

## CORRESPONDENCE, NOTES, ETC.

The following letter has been received from the Editor of *British Birds*.

### WOOD-PIGEON DIPHTHERIA.

SIR,—Much public interest has been shown lately in the disease of which Wood-pigeons have been dying so freely this winter.

The subject is of considerable scientific interest; moreover it is quite possible, although it has not yet been absolutely proved, that this disease, which is most infectious amongst Wood-pigeons themselves, may also be contracted by other birds and especially game-birds.

It is of great importance therefore to find a means of stamping out the diphtheria. Before however any effective means can be taken to eradicate the disease it is necessary to discover its origin.

To the January issue of the monthly magazine *British Birds*, Dr. C. B. Ticehurst, of Guys Hospital, contributed an article on the subject of Wood-pigeon Diphtheria, and explained that it was due to a specific micro-organism called *Bacillus diptheriæ colum barum*. At the same time Dr. Ticehurst points out that the Etiology of the disease is most incomplete and that much has to be learnt as to how it originates, and when it comes, and as to its distribution before we can suggest a remedy.

It is one of the aims of *British Birds* to induce co-operative observation on subjects such as the nature of the food of birds, etc., our knowledge of which can be little advanced by observations made at different times and under different systems. The Wood-pigeon disease forms an excellent case for a systematic enquiry all over the country, and schedules of the questions to be answered have been posted to all the readers of *British Birds*.

We have thus received much information and many specimens, but more of both are needed, and I should be delighted to supply schedules to

any of your readers who may be in a position to give information on the subject. All the observations will be collated and studied by Dr. Ticehurst who will draw up a full report at a later date.

I am, Sir, your obedient servant,

H. F. WITHERBY.

#### THE RECENT CRYSTAL PALACE SHOW.

I was unable to attend the recent Show, but Mr. Goodchild writes that the rarest exhibit was, probably, Mr. Astley's Parrot which was in beautiful condition and very tame.

Two male King Birds of Paradise were exhibited, but neither was in show condition, the 'wires' being broken off entirely in one and damaged in the other. Mr. Maxwell exhibited his Sun-bird, the same one that was at the Horticultural Hall; but on the second day it was unwell and had to be removed. No less than four Great Grey Shrikes were shown; one of them being a charmingly tame specimen: it received six special prizes.

A. G. B.

#### THE HEDGE-ACCENTOR.

Mr. W. E. Teschemaker writes that he does not regard the case mentioned by Mr. Williams in "Canary and Cage-Bird Life" as a fair one, the parent birds not having paired, built, or even laid in captivity. He however heard of a case in which this species was believed to have been bred, but upon enquiry found that the report was erroneous.

#### BREEDING BRITISH BIRDS.

Mr. William B. Gibbins writes:—"I was much interested in the letters in your January number of the *Avicultural Magazine* about breeding British Birds. I think they are quite as interesting as foreign birds. At the late Crystal Palace Show I was glad to see several specimens of British hybrids which till then I should have thought impossible. I had a pair of Cornish Choughs for several years. The hen laid eggs several times, but never hatched the eggs, though they were fertile: I have since lost the male bird, and find it almost impossible to get another without paying an exorbitant price."

There is no doubt that, in themselves, British birds are quite as interesting as foreigners, and in those cases in which the early life is imperfectly known, they are just as interesting to breed; but the chief object of breeding birds should be to learn something which was not previously known respecting the life-history; and when one compares British and foreign species the early life of the former has been pretty thoroughly studied, whereas our knowledge of the early life of the latter is still com

paratively meagre: for this reason I think that it is of greater importance to science to breed foreign than British birds, at any rate in the case of the familiar species of our gardens.

ED. *pro. tem.*

### BUSTARDS.

SIR,—I last year I wrote you about the death of a pet Bustard through eating bootlaces, etc. To-day I have just lost another young bird: an inspection of crop revealed one  $3\frac{3}{4}$  in. wire nail, one  $2\frac{1}{2}$  in., one  $1\frac{1}{2}$  in. and one  $1\frac{1}{4}$  in.; also a half piastre coin and a piece of wire an inch long. This should prove a warning to anyone possessing a Bustard.

W. G. PERCIVAL.

### HEMIXUS VIRESCENS.

SIR,—I shall be glad if any member will give me information regarding a Grey Bulbul, supposed to be *Ixos virescens* or White-browed Brush Bulbul. Habitat, habits, etc., also description of female. Mine sings remarkably well, and is the quietest bird in a cage I have ever seen, sitting for hours in one place. Eats fruit, soaked sultanas, mealworms, etc.

EDITH WARREN VERNON.

The female alone is described in the "Catalogue of Birds in the British Museum," vol. VI., pp. 53-54; as follows: "*Adult female.* Bright olive-greenish above, wing-coverts and outer edges of quills darker olive green than the back, the inner secondaries almost entirely dull olive-green; tail feathers blackish-brown, margined with a shade of olive, the outer feathers tipped with whitish on the inner web, and for a little distance along the latter; head and nape ashy grey, slightly tinged with olive; lores, eyelid, and a faintly indicated eyebrow ashy whitish; ear-coverts dusky brown, plainly streaked with dull white; cheeks whitish, streaked with dusky olive, with which the feathers are edged; throat dull white, slightly washed with olive; foreneck and breast white, the feathers edged with olive-green, producing a streaked appearance, the flanks also streaked in the same manner; lower abdomen, vent, and under tail-coverts pale yellow, white in the centre of the feathers; under wing-coverts and axillaries bright yellow; quills dusky brown below, yellow along the inner web; "iris dark red" (*H. O. Forbes*). Total length 7.5 inches, culmen 0.75, wing 3.35, tail 3.35, tarsus 0.7.

The Javan Streaked Bulbul appears to be confined to the island of Java."

This does not read like the female of a Grey Bulbul, and I do not know of any species of *Hemixus* having been hitherto imported as a cage-bird with the exception of the Indian Brown-eared Bulbul (*Hemixus flavala*) three examples of which arrived at the London Zoological Gardens in 1877.

The food of the species of *Hemixus* in a wild state appears to consist entirely of berries and insects. Until one is sure of the identity of Mrs. Vernon's Grey Bulbul, it is impossible to discover either its habitat or particulars respecting its habits.

A. G. BUTLER.

---

#### FOOD FOR LORIES AND LORIKEETS.

SIR,—Since I wrote to you on the subject of some experiments I had made on the food of lories, I have been trying experiments on an everyday diet for these birds.

The result of my trials is, that for some considerable time past all my lories and lorikeets have been fed on equal parts of milk, barley-water and pure water, poured on to powdered plain biscuit, and boiled and sweetened.

The barley-water seems to prevent the milk curdling. An examination of the excreta shows that in the case of every bird the digestion is quite perfect. The barley water seems to suit so well, that possibly the milk could be nearly or quite abolished.

The birds are fed twice daily, and each bird gets about three table-spoonsful of the liquid to one teaspoonsful of biscuit at each meal.

I also, of course, give fruit.

You may like to know that I have a pair of Red-necked Lorikeets nesting.

E. J. BROOK.

---

#### WOOD-SWALLOWS KILLING MICE.

SIR,—I wonder whether any of those who may have kept the White-eyebrowed Wood-Swallows in their aviaries have found that these birds are killers of mice!

I have some Wood-Swallows in a division of a twenty-compartment aviary, and I do not suppose they see many mice, for I am not much bothered with these pests; but the only two mice that have been seen to go into this compartment have been promptly killed by one or other of the Wood-Swallows.

The birds spit the mice through the head with one blow of their beaks, and then hide the body for future use, when tender.

The birds do not seem vicious with other species so far as I have noticed, though the only birds they have had to associate with are Scarlet Tanagers.

E. J. BROOK.

---

#### BREEDING REDPOLLS.

SIR,—I had bought a pair of Lesser Redpolls in the early spring of 1898 and turned them into the aviary. The cock bird died shortly afterwards. Some months later, on my return in May or June, the gardener

told me that a wild Redpoll was always about the aviary. I watched and soon saw the bird flying round, feeding on the spray millet through the meshes of the wire netting and trying hard to get through into the aviary, having evidently fallen desperately in love with the little captive hen. I set a trap-cage on the top of the aviary, caught him without any trouble, and turned him in.

The two birds at once set to work and built a lovely little nest in a shrub and reared a fine brood of young ones. Later on I found these Redpolls very inquisitive and mischievous with other birds' nests and gave them all their liberty. I also reared, about the same time, a fine hybrid between a cock Siskin and hen Greenfinch.

BEATRICE CARPENTER.

Although Mr. Swailes speaks of this bird (*Avicultural Magazine*, 1st series, vol. III., p. 69) as one of the readiest species to breed in confinement, it is probably not generally known (and certainly not to those who denounce the cruelty of keeping birds in captivity) how constantly, not Redpolls only, but other wild birds, will struggle to force their way through the wire netting of outdoor aviaries in order to join captive birds. I have seen the Redpoll trying to get into Mr. Seth-Smith's aviaries, and various Tits, the Willow Warbler, Robin, Blackbird, Song-Thrush, and Starlings have all tried to discover some way of getting into my larger garden aviary.

Not only do wild birds envy those in fairly large aviaries; but those in captivity frequently make no attempt to escape when they have the chance. A wild-caught Blackbird in one of my cages has, on two occasions, had his cage-door (a sliding one) left wide open by my man, after giving water in the evening, and the discovery was only made when I gave the bird fresh food in the morning: the bird was only caught in the winter of 1896-7, when it voluntarily entered my smaller garden aviary. The door of my Shama's cage has also been left wide open on two occasions and the bird has not taken any notice.

The mischievous meddlesomeness of the Redpoll was noted by me in "British Birds with their Nests and Eggs," vol. II., p. 75; but it cannot too often be impressed upon those who are desirous of breeding birds of greater interest and who, unless cautioned, might associate this little nest-destroyer with them.

I do not remember to have seen a hybrid between cock Siskin and hen Greenfinch; it should be rather a pretty bird. A. G. BUTLER.

---

#### PIED HEN BLACKBIRD.

A very remarkable hen Blackbird has been about my garden this winter: the crown of its head and two irregular collars encircling its neck being snow-white. Pied varieties of cock Blackbirds are commonly seen, but this is the first pied hen that I have noticed.

A. G. B.

POST MORTEM EXAMINATIONS.

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Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lanherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, *and a fee of 1/- for each bird.* If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons, and Canaries can only be reported on by post.

---

CARDINAL. (Mr. Trestrail). The bird has suffered for a long time with liver disease, which organ was nearly twice its normal size. Hence its functions were practically suspended.

PEKIN NIGHTINGALE. (Miss Hutchinson). This bird died of concussion of the brain owing to an injury. The blood referred to was a result of injury.

PEKIN NIGHTINGALE. (Lady Harriet Warde). The bird died of pressure on the brain. It had received an injury which had indented the skull and ruptured a blood vessel.

*Answered by post :*

Miss Chawner.

Mr. H. L. Sich.

Lady Lilford.

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### III.

NOTICES TO MEMBERS—(*Continued from page ii. of cover*).

#### NEW MEMBERS.

Mr. J. J. MANSON, L.D.S., 127, Canning Street, Glasgow.

Miss E. MARJORIE HINCKS; Barons Down, Dulverton.

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#### CANDIDATES FOR ELECTION.

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*Proposed by* Mr. HENRY SHERREN.

Mrs. LONGDON; Arreton, Epsom Road, Guildford, Surrey.

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Captain JOHN SHERARD REEVE; Leadenham House, Lincoln.

*Proposed by* E. G. B. MEADE-WALDO.

Mr. CLAUD MAGNIAC; The Cottage, Ashtread Park, Leatherhead.

*Proposed by* Rev. H. D. ASTLEY.

Mr. JOHN THOMSON; Powder Mill Lane, Waltham Abbey, Essex.

*Proposed by* F. F. ANDREWS.

Miss RIPLEY BEDSTON; Bucknell, Salop.

*Proposed by* The Hon. and Rev. Canon DUTTON.

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#### CHANGE OF ADDRESS.

The Lady GRANT DUFF; to Lexden Park, Colchester.

Mr. ALLEN SILVER; to 11, Foulser Road, Upper Tooting, S.W.

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#### ILLUSTRATION FUND.

The Council acknowledges with thanks the donation by the Hon. Mrs. Carpenter of ten shillings towards this fund.

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#### MEMBERS' SALE AND EXCHANGE COLUMN.

*The charge for private advertisements is SIXPENCE FOR EIGHTEEN WORDS OR LESS, and one penny for every additional three words or less. Advertisements must reach the EDITOR on or before the 26th of the month. The Council reserve the right of refusing any advertisement they may consider undesirable.*

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Lady GRANT DUFF, Leyden Park, Colchester.

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W. R. TEMPLE, Ormonde, Datchet, Bucks.

Wanted—Acclimatized hen Parrakeet, which would be likely to breed with

• King-Parrakeet.

Mrs. LEE, Hartwell, Aylesbury.

**JOHN D. HAMLYN,**  
**NATURALIST,**  
**221, St. George's Street East, London.**

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THE JOURNAL OF THE AVICULTURAL SOCIETY.

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NOTE.—A new volume commences every November.

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## THE AVICULTURAL SOCIETY.



Persons wishing to join the AVICULTURAL SOCIETY are requested to communicate with either of the Hon. Secretaries or the Editor.

### NOTICES TO MEMBERS.

The Subscription to the Avicultural Society is 10/- per annum, due on the 1st of November in each year, and is payable in advance. The entrance fee is 10/6. The *Avicultural Magazine* is sent free to members monthly. Members joining at any time during the year are entitled to the back numbers for the current year, on the payment of entrance fee and subscription.

*All MSS. for publication in the Magazine, Books for Review, and Private Advertisements* should be addressed to the Editor, *pro. tem.*, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent.

*All Queries respecting Birds* (except *post mortem* cases) should be addressed to the Honorary Correspondence Secretary, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent.

*All other correspondence, and Subscriptions*, should be sent to the Honorary Business Secretary, Mr. T. H. NEWMAN, Newlands, Harrowdene Road, Wembley, Middlesex. Any change of address should be at once notified to him.

Advice is given, *by post*, by members of the Council to members of the Society, upon all subjects connected with Foreign and British birds. All queries are to be addressed to the Hon. Correspondence Secretary and should contain a penny stamp. Those marked "Private" will not be published.

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Vols. I., III. & IV., are out of print. Second-hand copies sometimes reach the Publisher, to whom application should be made.

(Continued on page iii. of cover).





H. Goodchild del et lith.

Huth imp.

OLIVE FINCH, ♂. ♀.  
*Phonipara lepida*

# Avicultural Magazine,

BEING THE JOURNAL OF THE  
AVICULTURAL SOCIETY.

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New Series—VOL. VI.—No. 6.—All rights reserved.

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APRIL, 1908.

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THE OLIVE FINCH,  
*Phonipara lepida*,  
WITH SIDE GLANCES AT *PHONIPARA*  
GENERALLY, &c.

By REGINALD PHILLIPPS.

It is not in a wholly cheerful frame of mind that I take up my pen, by request, to write about the Olive Finch, for much water has flowed under Hammersmith Bridge since I parted with my last specimens and the bird is no longer fresh in my mind; and its place in the aviary and in my thoughts has for long been occupied by its cousin the very much rarer Cuba Finch, *Phonipara canora*, the "Melodious" Finch, the "Chanteur de Cuba," so called because its "song" is most frequently, and sometimes very frequently, only a noise, and, at the best, is but a poor performance. Moreover, so many people have written about the Olive Finch; and, moreover once more, in July and September, 1900, at pp. 191 and 237 of vol. VI. of our Old Series, I wrote about its very near relative *P. pusilla*, so nearly related that what is said of the one applies equally to the other; so those of our members who are interested in the genus *Phonipara*—a very interesting genus, by the way—should read the writings of former times as well as those of the present day.

Before proceeding further, it will be well to clear the air by saying a few words about other members of the genus, as there are not a few persons who are or have been happily preening their avicultural feathers under the idea that they have, or have had, "Cuba" or "Melodious" Finches, when all the while

their birds have been but the humble Olive Finch. The latter are not, or were not, fashionable, but the Cubas are; moreover, the Cuba Finch now-a-days is practically never in the open market; and so the Olives have been foisted on to the ignorant public as "Cuba," and even as "Melodious," Finches in something more than an unblushing manner. Olive Finches are, in truth, found in Cuba, but those which reach this country seldom if ever come from that island.

The true Cuba or Melodious Finch, *Phonipara canora*, is found only in the island of Cuba. "Male:—Throat and cheeks black, extending above the eye; a broad band of bright yellow extends across the lower throat to the sides of the neck, and passes in a narrow line, edging the black, to the eye; top of head slaty brown; rest of upper surface bright olive green; breast brownish black, shading into pale gray on the belly and under tail-coverts. Female:—Throat dark chestnut brown, shading into gray on the cheeks; yellow collar much paler than in the male; chest and under parts ashy; the rest as in the male. Length (skin) 3.75":—so Cory's *Birds of the West Indies*. The distinguishing mark of the species is the yellow collar, which appears at an early age, and can be recognised at a glance. It is curious that not a single description of this band or collar that I have ever met with is quite in accordance with the plumage of the living bird, illustrations being equally unfortunate. The description given in the British Museum Catalogue of Birds (XII., 144), although misleading at first glance, is probably meant to be correct; it runs as follows:—".... sides of neck and a collar across the lower throat golden yellow; fore-neck black." The word "across" is convenient but not strictly accurate, for the yellow on the one side is separated from the yellow on the other by the black fore-neck; and the illustrations that depict a broad unbroken band of yellow *across* the throat, often broader at the centre than at the sides, are as hopelessly out of court as are the usual descriptions that altogether omit any mention of the black fore-neck. The two yellow arms which constitute the so-called band or collar are broadest on the sides of the neck; they narrow as they approach the black fore-neck, and terminate on each side of the centre with a slight curve upwards (or rounding



off of the corner), abutting but never encroaching upon the black vertical line, a narrow one if you like but always unbroken. The black above and the black below are connected by the black line of the fore-neck, after the manner of a minute-glass. The same arrangement of feather obtains in the female, although in her it is but ill-defined. I have recently been examining the throat of a female:—"Chin chestnut brown, shading downwards into a very dark, almost a black and by no means obscure, bar across the throat, just above the yellow collar; from the centre of this bar drops the shade of the fore-neck, which entirely disperses as it flows into the ashy breast." Returning to the male, in a good healthy fully adult example, the black line of the fore-neck divides below, and, branching off horizontally to right and left, edges the lower side of each yellow arm of the collar, shading downwards into the brownish black breast. The density and extent of the patch of blackish on the breast seem to vary with the state of the bird's health, and, I think, decidedly increase as the nesting season approaches. This species stands rather by itself in *Phoniopara*, whereas all the other species, sub-species, varieties or races in the genus are, in all their ways so far as I know and read of them, simply Olive Finches, some of which have been taking a bath in the ink pot—some more, some less—and then have fluttered down the nearest sooty chimney that came in their way.

The Olive Finch, *P. lepida* (or *olivacea*), may be thus briefly described; *Male*:—Above dull olive; a superciliary stripe, lores, and a patch on the chin and upper throat orange yellow, very rich in good fully adult examples; rest of throat, &c., black; a narrow line of black borders the yellow of the throat and reaches to the front of the eye; under parts olivaceous gray. *Female*:—"Lacking the black of head and throat in the male; the yellow is much less conspicuous and paler; belly dull gray; the olive of the back duller than in the male. Length 4 inches." I must add that although the female "lacks the *black*" she does not lack the lines, for in old females the dark lines are well marked. The young birds lack the black and yellow, which appear during the first moult, when they are *about* three months old; these colours, especially perhaps the yellow and dark line-marks on the female, become better and more sharply defined as the birds arrive at

full maturity. The extent and density of the black about the breast, &c., of the male of this species, with its sub-species, seem to vary greatly according to the health of the individual bird, I think also with the season, and doubtless also with its age. At the recent Bird Show at the Palace, exhibit No. 2116 was a male Olive Finch, which displayed about a minimum of the black usual for this region. This bird, by the way, was entered in the Show catalogue as a Cuba Finch. No. 2123 was a good pair of the true Cuba Finch, "claimed" promptly for £4 by some fortunate person. The reporter on the Show for one of the bird papers, perceiving two very different species each catalogued as a Cuba Finch, and not knowing the real name of No. 2116, referred to it as a "Black-breasted Cuba Finch." The level of a Bird Show would be raised if there were some competent person appointed, whose duty it should be to look out for such cases as this, of which a limited number occur at almost every exhibition of foreign birds; such an official would attach a notice to the cage, setting forth the correct name—and in some cases something more than the mere name—of the occupant. In other ways, aviculture has greatly advanced, thanks no little to the Avicultural Society and Magazine, but Bird Shows, in an avicultural sense, remain as they were, while they might be made of real educational value.\*

But to return to the descriptions of the plumage of the Olive Finch. The following are some brief jottings I made a few years ago on the plumage of a young male, which had been bred in the aviary and brought into the house, precise age uncertain, say three months:—"Little yellow line above eye, and perhaps small speck of orange on lores; little spot of yellow on chin; dull blackish down throat, fore-neck, to upper chest, not spreading to sides; little ill-defined black near base of lower mandible; no black on forehead."

*Habitat* :—"Cuba, Jamaica, Haiti, San Domingo, and Porto Rico."

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\* At page 198 of the *Canary and Cage-Bird Life* issue of March 6, Mr. H. Scherren mentions a conversation he overheard at the Palace concerning certain foreign birds, and closes his remarks with—"Their interest was quite real, but how greatly their pleasure would have been increased by a little knowledge."

The Museum Catalogue gives two sub-species, *P. pusilla* and *P. intermedia*. These are but Olive Finches, with more black on the breast region. *Pusilla* comes from the mainland—"From Mexico, throughout Central America to Panama and Columbia"; in a really good healthy male, practically the whole of the under parts, from side to side and reaching to the abdomen, are black or blackish, the orange throat excepted. In *Intermedia*, it is the extent of the black on the breast that is intermediate between *Lepida* and *Pusilla*; it is found on Cozumel Island, &c. All of these may be recognised by the yellow superciliary line, lores, and upper throat.

Lastly, we come to the birds that want the yellow on face and throat, of which may be taken as the type—

The Dusky Finch, *Phonipara bicolor*, from the "Lesser Antilles generally; Venezuela and Colombia," with its less dusky edition *P. marchii*, from "Jamaica, San Domingo, S. Croix, Santa Lucia, S. Thomas, and Barbadoes." So the *Br. Mus. Catalogue*; but Cory does not seem to see his way to recognising *P. marchii* as distinct, and includes all in *P. bicolor*. Mr. Bonhote, whom we quote below, tells us that *P. bicolor* is found also in the Bahama Islands. The Catalogue (p. 151) introduces yet another bird, *P. fuliginosa*, from Guiana and Brazil, which is quite unknown to me. It seems to be like the Dusky Finch, but larger and more sooty generally, and at page 820 is declared to be worthy of being regarded as a distinct species. "Underparts dull sooty grey; the under tail-coverts edged with ashy fulvous."

All the birds of this genus are tiny creatures (but full of fight), ranging in total length from the 3.4 inches of *Canora* to the nearly 5 inches of *Fuliginosa*, the females being a little smaller. They are so closely allied that one feels they are practically but local variations of the same bird, with similar habits modified by local conditions—with the one exception of *P. canora*, which, although closely allied, differs from the others in various little indescribable and subtle ways. Broadly speaking, there are just three, the Cuba Finch, with its yellow collar "across" the lower throat; the Olive Finch, with spot of yellow on lores, chin, and upper throat; and the Dusky Finch, which dispenses with brilliants altogether.

In the following notes, I shall not distinguish between *P. bicolor* and *P. marchii*, but will refer to them without discrimination as Dusky Finches, *P. bicolor*.

In January last, at the foot of p. 90 of our Magazine, Dr. Butler writes:—"...the species of *Phoniopara* he (Ridgway) calls 'Grassquits,' a name applied to the genus in Jamaica, but the meaning of which is not evident." The name "Quit" is still common in Jamaica, and sometimes causes confusion (VII., 227), so a little digression here may be of occasional assistance to our readers. The excerpts are from Gosse's *Birds of Jamaica*, from which I will quote too on the subject of the Olive and Dusky Finches. The "Banana Quit" (p. 84), the Black and Yellow Creeper, *Certhiola flaveola* (*Br. Mus. Cat.* XI., 43), is a Flower-pecker. The "Orange Quit" (236), the Rufous-throated Tanager, *Glossiptila* (*Tanagrella*) *ruficollis* (XI., 48), seems to hover between the Flower-peckers and the Tanagers. The "Blue Quit" (238), the Grey Grosbeak, *Pyrrhuloxia* (*Euphonia*) *jamaica* (XI., 85) is also included in the *Tanagridae*. The "Black-faced Grassquit" (252) is the Dusky Finch; and the "Yellow-faced Grassquit" (249) is the Olive Finch. Writing of the last two, Gosse says:—"Both of these birds are permanent inhabitants of Jamaica; their habits are so similar that the detailed history of one will apply to the other. Both are quite common and familiar." He also brings in (253) the "Bay-sided Grassquit," *Phoniopara adoxa*, concerning which he is doubtful, but he adds:—"The name of Quit is applied, without much discrimination, by the negroes of Jamaica to several small birds.... it is probably an African designation."

Referring to the fields of guinea-grass, Gosse writes (250):—"In the autumn, when the grass is grown tall, and the panicles of seed waving in the wind give it a hoary surface, the little Grassquits (both Olive and Dusky Finches).... throng hither in numerous flocks, and, perching in rows on the slender stalks, weigh them down, while they rifle them of the farinaceous seeds. In March, I have found the stomach of the Yellow-face full of seeds of the common pasture grasses; and I have been struck with the enormous dilatation of the membranous craw, which, as in the Gallinaceæ, occupies the hollow of the *furcula*. D'Orbigny

...alludes to its prevalence in all the great Antilles. At the Havanna, he says, it (the Olive Finch) is frequently caged, being very docile and readily learning to sing. The Grass-birds remind me \* much of the European Sparrow (note the reference below to the Bahama 'Sparrow'). They are very sociable, have a strong predilection for the house-garden, and, when feeding by half-dozens and dozens together, are very noisy. They have a peculiar shrill chirp †: and, in the season when the grasses are in seed, their diminutive bodies, for they are smaller than Wrens, may be seen weighing down the culm of the grass, everywhere about."

At first thought, the references made by writers to *Phonipara* being "quiet" little birds, using the word in the sense of "amiable," strike one as comical, for every aviculturist who has personal knowledge of any of these species in captivity agrees that the males are veritable little x x x x x if able to get at one another. Even the young must be removed from their parents as soon as practicable or they will probably be murdered. But with the wild birds, leading natural lives, with plenty of space and having to work for their living, nesting when they will and without restraint, matters are very different. Nevertheless, although so "quiet" at one season, probably at others there is many an unrecorded battle over some well-favoured Black- or Yellow-faced damsel or favourite nesting-site; but the defeated swain can always save his scalp by flying across the boundary. In captivity, restraint is everywhere; even the very seasons are in league against them; the fiery pent up feelings and energies are madly seeking for an outlet, and for an opportunity to be up and doing; and any probable or possible rival must be swept out of the way at any cost.

My notes occasionally refer to the song of the Olive Finch, which I cannot clearly recall to mind, though I well remember that it had a song, which is more than I should like to say of the so-called "Melodious" Finch. Over and over again I have heard it in my dining-room during the cold season, a short pretty little oft-repeated song. One of my notes, dated 3 June,

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\* Here Gosse quotes Mr. Hill.

† Doubtless families—The young are particularly noisy while following their parents.—R. P.

1901, of a building pair in my garden-aviary, says of the male—"Sings a great deal," and another, two days later—"Male on high perch in front singing as if master of the aviary." In January last, at page 91, Dr. Butler wrote:—"...the more gaudy Grass-finches, somewhat recalling the colouring of *Phonipara* and many of them with similar whispered songs." I find myself unable to follow Dr. Butler here; none has a whispered song that I know of, nor has any similarity in colouring attracted my attention. Neither, may I add, have I noticed any likeness in habits or carriage between *Phonipara* and *Poëphila*; moreover, the former lay spotted eggs, the latter white.

The nests of *Phonipara* are domed; but nests built by the same pair (for both birds work) differ from one another according to circumstances and environment. Gosse has the following curious reference to domed nests (86):—"An exceedingly interesting memoir, from the pen of Mr. Hill, on the prevalence of domed nests within the tropics, and the connection of this fact with electricity, will be found in the Zoological Transactions for September 14th, 1841."\* Perhaps some Fellow of the Society will kindly look up the reference, and report to us of its nature.

The nests are constructed chiefly of dried grasses; and, with me, feathers were freely used, although not necessarily for the lining; for these birds, if proper materials are not within convenient reach, will make use of almost anything that may come handy, and will build almost anywhere and under any circumstances. The eggs, when fresh and blown, are clear white, spotted, chiefly around the larger end, with red or reddish-brown, or *perhaps* with pale brown. As far as I have seen, with healthy properly kept birds, the spots are of a rich deep reddish or reddish-brown when laid, but this colour fades. The only eggs that I have myself seen which were spotted with pale brown were those of a "pair" of female Olive Finches, who set up house-keeping together in my aviary; this was not because they had become tainted with the suffragette microbe—*pas si bête*—it was only because at the time I had not a male for them; and, even in this case, the eggs may have been brightly coloured when first laid, for they may have been, and probably were, some weeks old when I rifled the nest.

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\* Apparently the Proceedings of the Zoological Society.—ED.

I cannot do better than add here a few more extracts from Gosse's *Birds of Jamaica*, for he gives us much information on the nesting habits of Olive and Dusky Finches in the wild state: and the digressive references to birds and wasps are too interesting and instructive to need apology.

Page 252:—"On one occasion, some twenty or thirty of the Yellow-throated Grass-bird (Olive Finch) constructed a mass of nests within the wide crutch of a baobab tree, and lived in common." This is suggestive; but the last four words are not to be accepted right away, I think. Mr. Hill was the authority for this note.

Page 251:—"Mr. Hill has favoured me with the following note. 'Nests of the Grass-bird are frequently brought to me, but without distinguishing between the yellow and the black-throated species. A nest in the garden, built in a *Nerium oleander*, by the latter (in July), enables me to set down a remark or two. I see no difference in the structure of the nests of the two species. They are both domed nests, made of pliable dry grass, and lined with horse-hair. This nest is built between the forks of the long vertical stems of the *oleander*, or South Sea rose. Three other vertical stems press it close, and the leaves quite canopy it over. The substratum of the nest, on which it may be said to be bedded, is a mass of long linen rags, wound in and round the forked branch.

'It is quite true that the Grass-bird very frequently selects a shrub on which the wasps have built, fixing the entrance close to their cells. I saw a nest in this secure situation a few years ago; it was pointed out to me as illustrating a habit of the yellow-throated species (Olive Finch).'

At page 85, writing of the Banana Quit, Gosse says:—"The nest of this bird is very frequently, perhaps usually, built in those low trees and bushes from whose twigs depend the paper nests of the Brown Wasps, and in close contiguity with them. The Grassquits are said to manifest the same predilection; it is a singular exercise of instinct, almost of reason; for the object is doubtless the defence afforded by the presence of the formidable insects." It appears that it is not only in Jamaica that birds seek the protection of wasps for their nests. In December last, at p. 446 of *Canary and*

*Cage-Bird Life*, Mr. H. Scherren wrote :—" In Venezuela, according to the report of a collector sent out by the Brooklyn Museum, there exists a remarkable kind of companionship ('symbiosis') between a certain species of wasps and the Yellow-rumped Hang-nest. The wasps build a huge nest, which attains a diameter of 5ft., as is shewn by two specimens in the museum ; and around this as a centre the Hangnests construct a colony of their own pensile nurseries. If the wasps' nest be destroyed or abandoned, the Hangnests forthwith desert their own domiciles." And, again, page 494,—“ In *The Field*, Colonel W. Giffard reports that he met with something of a similar kind in Gold Coast Hinterland in the case of wasps and a small Waxbill, which I take to be the Cordon Bleu. He says that the bird nests in bare mimosas, and of the many he saw each had a wasps' nest about a foot from the opening of the nest. The wasps and their nests were very small, the nests flat and roughly circular. The wasps were particularly venomous, as he discovered when investigating the Waxbills' nests, not having noticed the wasps.... After he first noticed the nests close together he never found a Waxbills' nest without a wasps' nest at hand, but occasionally a wasps' alone.”

Now let us take two ordinary nesting cases of the Dusky Finch. (1) Gosse, *ibid.*, p. 253 :—" .... in June was built between three contiguous stalks of maize, and an ear. It was a dome composed of slender stalks of grass and weeds woven into a globose form, flattened in front, on which side was the opening. The dried beard of the corn entered into the structure, and a small frond of fern, and a tendril or two of passion-flower adorned the entrance. Three eggs were laid, measuring  $\frac{7}{16}$  by  $\frac{1}{2}$  inch ; pointed ; white, splashed with dull red, chiefly at the larger end, where confluent." (2) Bonhote, *On some Bahama Birds*, *Avic. Mag.* VIII., 280 :—" Another quiet and sombre inhabitant of the coppet, as well as of the gardens, is the Bahama Sparrow.... This bird is remarkably tame and hops about the verandahs, even coming into the house to pick up the crumbs from the table. The nest is a very pretty domed structure placed about four or five feet from the ground at the top of a long straight sapling. It is made entirely of grass woven and matted together, with the entrance hole at the side, but without lining



of any kind; the eggs, usually three in number but sometimes more, are dull white in colour, with brownish spots towards the larger end."

And now we must turn more directly to the Olive Finch in captivity, in the United Kingdom.

The following extracts from letters written by a Mr. M. at Dundee shew us the ease with which this species may be bred; the parent pair had been sold to him by a London dealer as Cuba Finches. Under date 25 Sept., 1900, Mr. M. wrote:—"Ref. the Cuba Finches. I bred them in a cold room in a small square cage 10 x 10 and about 15 in. high. I placed a small flower pot well up the cage, with a square hole cut out of the lip  $1\frac{1}{4} \times 1\frac{1}{4}$  in. (covering the mouth of the pot with wood), put a small quantity of withered grass in the pot, and gave them cow hair to finish, which they did very nicely. There were four of them altogether; one died after being on the sticks. They, the old ones, were fed on ripe and well seeded chickweed, with canary and millet; and the ordinary canary egg food used in the breeding time. I would have had another nest, as they immediately went to nest again and laid another four eggs, but unfortunately a wild black-bird got out of his cage and scared the hen from her eggs, which were only two days from hatching, that being on the 12th day. The old hen left the nest every time I went into the birdroom; and if I did stop for a time she would pop in and out every other minute. I am sure I will be able to breed them next year with better results, provided they are spared to live." On October 11, he wrote further:—"Ref. Cuba Finches—so far as I can recollect they hatched about 13 days after fourth egg was laid. I have no dates, but they were bred in July. I calculated them coming out same as canaries, and they did as I expected." The three young birds referred to above I purchased: see my foot-note O.S. VII., p. 30—I had been misled by the vender of the parents, for the young developed into ordinary Olive Finches.

I have myself noticed that the female usually leaves the nest if it be approached. I have reared several young, and so has Mr. Seth-Smith. I need refer to only one of my nests—in the garden-aviary—in which at the time were some rather large and unamiable birds, who caused the Olive Finches to have rather

a bad time. One young one had been reared somewhere in the depths of the aviary; after a while, another single youngster appeared from somewhere. It was one of these two, I know not which, whose transition plumage I described above. And then the parents, who from time to time had played at nest-building in a little thorn bush which was in the very front of the aviary and fully exposed to view, unable to bear further persecution, overcame their objections to human society, and completed and occupied this nest. They had no wasps to act as guards, but they were equal to the occasion. My laconic notes run as follows:—"6. 8. 01—Felt in nest; there were young; funnel sloped down from nest, and strongly fortified at entrance by thorn boughs; suspended—no boughs under"; *i.e.* the entrance to the nest was brought up, or rather down, to a cluster of thorn branches growing together so closely that no large bird could get at it without much difficulty. Later, they laid again in this nest; and, on the morning of September 19, I found this entirely suspended nest apparently falling, owing to the weight of the young birds, assisted, doubtless, by that of the parents during the night. While arranging a support, all the youngsters bolted, four, or possibly five: I thought I counted five, but eventually could account for only four of them. Later, the parents slept in this nest, which they had endeavoured to repair. One night, it came to grief, and I removed it altogether. The succeeding night the male, who was in perfect health, presumably failing to occupy a warm or sheltered roosting spot, although there were numbers of artificial shelters about, took a chill (the weather was cold and wet) and died in a few hours—so slender is the thread that holds the life of these tiny creatures, in our inhospitable climate.

The fledglings are noisy little fellows; one of my notes runs, "Young make great noise, calling *tsit*." Both parents feed the young, the female usually, though not invariably, being the more faithful in her attentions to them. Both are inclined to be erratic, as they always want to be nest-building or nest-repairing; all being well, they keep to the same nest, brood after brood. The following note is worth reproducing—"Male fed from crop eight times without stopping," *i.e.* fed a young bird. Within the limits of an aviary, only one pair may be kept, and, if practicable, the young should be removed from their parents at an early age.

Olive Finches, however sociable they may be among themselves when wild, do not, in captivity, save under exceptional circumstances, associate or interfere with birds of other genera, grassfinches or otherwise. Although inseparable, the male and female do not usually cuddle together; as a rule, I think, they prefer roosting in the open, especially in a natural tree, to sleeping in a box or nest; so far as I have been able to observe, when they sleep under cover, invariably from preference in a natural nest, they do so for warmth and shelter—and may be in order to hide from prying eyes when in a small or exposed-to-view cage or aviary.

*Food*:—Indian and spray millet, canary, millet. Needless to add that, when in the garden at any rate, suitable “green” seeds would be very acceptable. When feeding young, they certainly are keen after “green” seeds, although the young may be reared without them. At page 341 of vol. IV. of our New Series, Mr. Seth-Smith writes:—“I supplied flowering grass daily . . . A pair of Olive Finches had a hungry brood near by, which they too seemed to feed almost entirely upon grass-seed.” Presumably they take aphides, but I am unable to make any definite statement on that point.

The female of this species I have found to be a fairly good liver, quite a good liver when acclimatized, if not left out in the garden altogether until too late in the autumn, nor left in the presence of the male say from mid-winter until about May. Not so the male, who, with me, had a weakness for going off at a few (30—40) hours’ notice from inflammation or bronchial trouble. It seems to have no stamina—great warmth steadily maintained is the only thing which I know of that affords even temporary relief. I used sometimes to think that his fiery ardent nature might have something to do with this. For in truth he is a truculent fellow, which causes embarrassment in the management. In my judgment, the best treatment during the cold season is to remove the females out of sight and hearing; more than one male may then be allowed to fly together, the more the merrier if there be plenty of space. Let them fly loose, with other birds, in a *very moderately* warmed birdroom, and let them have a little fly and peck (of inestimable value) in the open garden-aviary on not too cold

days. They are intelligent, and, with a little guidance at first will not only find their way backwards and forwards through a very small opening but may be trusted to return to the shelter of the room if at all cold, and in any case to come in long before dark. One would have thought that other small birds might have sufficient sense to do likewise, but such is not always the case. Some species will never come in to roost unless compelled to do so. Others, like my Ringed Finches (*Sticteptera annulosa*) at this moment, cannot find their way backwards and forwards through a small aperture, notwithstanding that other species are shewing them the way, under their very noses, all through the day: for the Ringed Finches, I have to throw the window wide open; and they require a great deal of schooling, delicate though they be, before they can be taught to sleep in comfort in the birdroom—I mean, during the winter months. *All* members of the genus *Phonipara* must be regarded as delicate, so far as temperature is concerned.

To sum up, the Olive Finch is an exceedingly nice little bird, and is neglected, when imported, only because its merits are not known. A good fully adult male, thoroughly healthy, is a pretty little fellow, the deep black and rich orange of face and throat being very attractive. It is intelligent, sprightly, and tame, a bird of some character, and much more engaging than is many a one that is habitually kept by aviculturists in this country.

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## SOME VICTIMS OF FASHION.

By GORDON DALGLEISH.

Since the wearing of bird plumes has become “fashionable” an immense amount of harm has been done by certain Mahommedan natives in India who, finding out some birds are valuable, slaughter them wholesale, and in the catching of these they are singularly successful. One very ingenious way they have is by means of bird lime. The fowler first of all provides himself with a large screen made of leaves and grass. This he carries in one hand; in the other he has a number of bamboos that can be jointed together like a fishing rod, the last joint being very thin and forked at the end; this being smeared with bird

lime. Hiding himself behind the screen he crawls near the birds, and one by one very cautiously joints the pieces of rod together, gradually pushing them all the while near to the unconscious birds. When he thinks he has got near enough he gives the rod a sharp twist, and the sticky limed ends catch in the birds' plumage. He then drags the bird to him and slips it into a closed basket at his side. I have seen a clever fowler catch several one after the other before the rest of the flock were aware of what was taking place.

For the capture of Egrets the jointed rod is used, only instead of having the ends limed a short barbed spear is fixed; the fowler now creeps under the tree where the Egret is sitting on her nest and transfixes the unfortunate bird on the barbed end. A whole "heronry" may thus be cleared in a single day. For Egret plumes a considerable price was realised in the Calcutta market.

Thanks to efforts made by a Society for the protection of birds in India great restraint has been placed on these marauders of the feathered tribe.

Vendors of "Ospreys" as Egret plumes are known to the trade, try to salve the consciences of the buyers that these plumes are artificial; but this has been repeatedly proved to be not true. It is not possible to manufacture artificial plumes of this sort and purchasers of "Ospreys" would do well to swallow this statement *cum grano salis*. Some slight idea may be formed of the immense destruction to the feathered tribes from the following sale notice, quoted by Mr. Dewar:—"At the feather sale at the Commercial Sale Rooms, London, on 19th April, 1904, there were 161 packages of Osprey feathers, of varying quantities, these being all the plumes of the various Egrets and small Eastern Herons, with a few of the Common Heron (*A. cinerea*). Of Birds of Paradise from New Guinea, there were 3255, chiefly *P. apoda*; of Impeyan Pheasants from the Himalayas, 648; of Indian Rollers no fewer than 3913; with also a large number of East Indian Pigeons, and Pittas, Indian Owls, Parrots and Jungle cocks. One firm catalogued 469 Chinese Mandarin Ducks. The remainder of the birds were mostly from America, comprising 52,628 Humming Birds, and numerous Cardinals, Tanagers,

Trogans, Toucans, Parrots, etc. There were also a large quantity of wing quills from Pelicans, Swans, Geese, Turkeys, and Eagles." Mr. Frank Finn has suggested that Egrets might be with advantage "farmed" and kept in captivity like Ostriches, for the sake of their plumes, and since the public must and always will have "Ospreys" the suggestion might be considered.

I herewith append a list of the principal "plume" birds of India with descriptions and notes.

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#### THE WHITE IBIS (*Ibis melanocephala*).

General colour, white. In the breeding season there are elongate white feathers round the base of the neck and on the upper breast. The tertiaries or upper wing feathers hang in long graceful plumes, elongated and loose textured. The head is bluish black and devoid of feathers. The bird has a total length of about 35 inches. This Ibis is resident and fairly common in the plains of India where there are sheets of water of any size, generally in flocks except when nesting. Its food appears to consist of small shell fish, worms, and insects. The nest is built on large trees and is composed of sticks. The eggs vary from two to four in number and are of a pale bluish white, not spotted, though occasionally marked with faint brown.

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#### THE ADJUTANT (*Leptoptilus dubius*).

The whole head, neck, and pouch devoid of feathers; there is a ruff of soft white feathers round the base of the neck; the whole of the upper plumage with wings and tail black slightly glossed with green. Lower parts white; the under tail feathers are soft and downy. Length: 60 inches.

The Adjutant is a large Stork, which has forsaken the traditions of its family and taken to the ways of a scavenger for a living, feeding with Vultures, Crows and Kites on any offal or refuse. Formerly it was exceedingly plentiful in Calcutta, but now that the sanitary arrangements of that city have improved, the Adjutant has taken itself off. Besides feeding on carrion, its food also consists of frogs and small reptiles. It is from this bird and the small Adjutant (*L. javanicus*) that "Marabout" feathers are obtained, these being the soft under tail feathers so

much in demand for ladies' feather boas. When I was at Aden I had a small bunch of these "Marabout" feathers offered to me for five shillings. I eventually secured them for fourpence! Adjutants, like other Storks, are completely devoid of voice muscles, and the only sound they appear to make is produced by the snapping of the huge bill. They breed rarely in India, but plentifully in Burmah, and the nest is a huge structure of sticks placed on large trees. They breed in colonies, sometimes in company with Pelicans, and the eggs are white and three in number. The fowlers snare Adjutants by means of nooses fastened on bamboo pegs stuck in the ground. Mr. Inglis thus describes the process:—"The nooses which are all close together are put down on three sides near where the bird is feeding, and the men gradually make it edge up to them. If it steps into them well and good, if not they take them up and put them farther on. It is generally a very lengthy proceeding but that is immaterial to the native."

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#### THE LARGE EGRET (*Herodias alba*).

Colouration, pure white. The breeding plumes consist of a very long train of feathers springing from the back—these are the "Ospreys"—extending from four to five inches beyond the tail. There are no crest or breast plumes. The bill is black in the breeding season, at other times yellow. Length about 36 inches.

The large Egret, or as it is sometimes called Great White Heron, is plentiful throughout the plains of Northern India, and is also found in Burmah and Ceylon. It breeds like all Herons in large colonies, but after the breeding season is a somewhat solitary bird. I have always found it extremely wary and difficult to approach, but when nesting loses much of its natural wariness, and is then tame and confiding, and hence falls an easy prey to the fowler. A good many birds that are at other times wild and inaccessible lose this trait when nesting, and a case in point came under my notice a year ago. A gamekeeper I was in company with found a nest of young Jays (*Garrulus glandarius*) and both the old birds sat close to the nest refusing to leave and paid the penalty with their lives. The Jay at other times is one

of the wildest and most cunning of all birds, and it is no easy matter to shoot them. This is the case also with the Wood Pigeon (*Columba palumbus*), and yet I have seen one almost caught before she would leave her eggs.

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#### THE LITTLE EGRET (*Herodias garzetta*.)

This Egret may at once be distinguished from the last by its smaller size, and possesses a crest in the breeding season, consisting of two long white feathers: moreover the bill is black at all season.

This is perhaps the best known and most persecuted of all the Egrets, and owing to the enormous demand for its plumes, has, in many parts of the world, been almost completely exterminated. In India it is common in many parts, but that the value there of its plumes is well known is proved from the fact that as much as Rs. 15 per *tola* is sometimes realised for them; Rs. 8 and 10 being paid for those of *H. alba* and *H. intermedia*.

\* \* \*

#### THE SMALLER EGRET (*Herodias intermedia*).

Pure white. The breeding plumes on the back nearly touching the ground and varying in length from 15 to 17 inches. There are also long breast plumes and no crest. Bill in breeding season black, at other times yellow. Total length about 26 inches.

This Egret is found throughout India, Ceylon, and parts of Burmah. It is also found in China and Japan. Its habits and nesting arrangements agree with the other Egrets. It breeds in large colonies on trees. The eggs are a pale bluish green, generally four in number.

\* \* \*

#### THE CATTLE EGRET (*Bubulcus coromandus*).

In winter, pure white, with the exception of a buff patch on the forehead. In the breeding season, the whole of the head, neck, and back plumes a delicate orange buff. The back plumes do not extend beyond the tail. The bill is yellow at all seasons. Length: 20 inches.

This Egret derives its name from being constantly attendant on cattle and buffaloes, and is frequently to be seen



perching on their backs searching for ticks. It is far less aquatic in its habits than other Egrets. It breeds in colonies generally in mungo topes. It would appear that this bird does not always assume nuptial dress when breeding, as Mr. C. M. Inglis writes: "In one colony which was breeding there were quite as many birds in winter plumage as in the other dress." The orange dorsal plumes are most valuable, sometimes realising from Rs. 10 to 16 a *tola*.

\* \* \*

#### THE POND HERON (*Ardeola grayi*).

In breeding plumage the head and neck are yellowish brown, darker on the crown; throat, white; feathers on the breast long and brownish with narrow white streaks; back feathers long and deep maroon gradually darkening towards the tips; rest of body, tail, and wings, white; a crest of long white lanceolate feathers.

In non-breeding plumage the head and neck is brown streaked with buff; no dorsal or breast plumes. Bill, blue at the base, yellow in the middle, tip black. Legs and feet pea green. Total length: 18 inches.

The Pond Heron or "paddy bird" is not only the commonest Indian Heron but one of the commonest of Indian birds found throughout the country, Ceylon and Burma, where in the last named country it meets with a closely allied form *A. bacchus*. Its range extends to the Persian Gulf and the Malay Peninsula. It is also found in the Andaman, Nicobar, and Laccadive Islands.

Being an ardent disciple of Isaac Walton's the paddy bird will spend hours at a time staring in the murky depths of a pool or pond waiting for its finny prey to come within reach of its sharp and deadly bill. It also devours numbers of frogs. Anyone accustomed to see the paddy bird in winter would hardly recognise the same bird in all the glories of its nuptial dress, and arrayed in this it is truly a splendid creature, rivalling its nearly the Squacco Heron (*A. ralloides*) of S. Europe. When flying, the Pond Heron gives utterance to a harsh croak. Most of the Heron family with, perhaps, the exception of the Cattle Egret, are sedentary birds, but the Pond Heron is the laziest of the whole tribe. The plumes of this bird are not so valuable as

those of the Egrets, but it gets persecuted to a certain extent, not only on account of these but also because certain natives hold its flesh in high esteem. So very tame is the bird that in many parts of India it has received the name of "blind heron"; and indeed at times is almost trodden on, so loath is it to take wing. The paddy bird breeds like all Herons in colonies, from May to September, and lays from four to six greenish blue eggs.

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## THE BLACK CASSIQUE.\*

*Cassidix oryzivora.*

This somewhat Crow-like Starling was mentioned in the Magazine some years ago by Mr. R. Phillipps under its Dutch name of "*Zwarte Kivispaal*." It has been called the "Great Black Rice-Bird"; in Ecuador Mr. Goodfellow tells us these birds are called "Garapateros" (tick-eaters) from the fact doubtless that they often settle upon swine to search for ticks, as recorded by Mangelsdorff. At Para the name "Graúna" seems to be given, and at Rio Janeiro "Mairo." I do not know the translations of these names.

The most interesting fact with regard to this species is that it builds no nest, but lays its eggs in the nests of other Icterine birds, such as *Ostinops decumanus* and *O. cristatus*, *Cassicus persicus* and *C. affinis*: but, although parasitic, it is not destructive after the manner of the Cowbirds (*Molothrus*) but is satisfied for its young to take their chance with the young of the foster-parents.

This curious phase of parasitism was first discovered by Dr. Goeldi, who published an account of it in his "Aves do Brazil," p. 284; and subsequently, when on a visit to Pará he was informed that it had the same habit there.

Dr. Goeldi's book being regarded by systematists as an unscientific publication, his discovery was, to all intents and purposes, shelved, until in 1896 Herr Kuschel communicated a note to the "Ibis" to the effect that he possessed eggs of *C.*

---

\* Or should it be "Cacique" as the Americans spell it? In England we adopt the phonetic spelling for this word!

*oryzivora* taken out of the nests of *Cassicus persicus*, and stated that his collector had seen females of the former entering nests of the latter, and that one of these when shot and opened contained in its oviduct a mature egg.

In "Timehri," vol. X., n.s. p. 37 (vide "Ibis" 1897) there is an article entitled "Queer Homes" by Mr. C. A. Lloyd, in which he appears not quite to understand the parasitic habit, for he says that *Cassidix oryzivora* seems never to build a home of her own, but contents herself with making use of the deserted Bunyah nests in which to lay her curiously marked eggs. By the way T. K. Salmon (Proc. Zool. Soc. 1879, p. 510) describes the eggs as "white": he sent home two eggs differing remarkably in size, the smaller one being presumably that of the owner of the nest. In vol. XI. of Timehri Mr. Barshall confirms the parasitic habit of the species.

In its wild state the Black Cassique feeds upon all kinds of insects in various stages, as well as ticks and other pests which annoy different domesticated beasts; also certain cereals, rice, maize, etc. Moreover, according to Mangelsdorff, it is often caught by the Brazilians, who let it have the run of the house, after the manner of a Jackdaw, and then it accepts all varieties of human food. Then again we are told by Mr. Goodfellow that he frequently shot the species in banana-plantations, where it was feeding upon the ripe fruit. Thus it is perfectly evident that in captivity this bird ought to do well upon the usual food supplied to Hangnests, Tanagers, and many other insectivorous birds.

It would seem that, after the manner of the Cowbirds, the young desert their foster-parents and join flocks of their own species soon after they leave the nest; since Natterer speaks of coming across flocks in a maize plantation at Caiçara in January accompanied by young already fledged.

A. G. B.

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## NOTICES OF NEW BOOKS, ETC.

THREE VOYAGES OF A NATURALIST, by Mr. J. NICOLL, with an introduction by the Rt. Hon. the EARL OF CRAWFORD. WITHERBY & Co., 326, High Holborn, London.

When one picks up a book with the object of reviewing it, one is not always tempted to read it through from beginning to end; but the present one is so absorbingly interesting to anyone with a love for Natural History, that it is utterly impossible to read it in a perfunctory manner.

Like Bates' "Naturalist on the Amazons," and Wallace's "Naturalist in the Malay Archipelago," Mr. Nicoll's account of his three voyages carries the reader in imagination to all the scenes which he visited, the illusion being considerably assisted by the beautiful photographs which accompany the text; so that, when once taken up, it is almost impossible to lay the book aside until it has been read from cover to cover.

In the earlier chapters one gets the impression that the author has a decided preference for sea-birds and waders; this however is due to the fact that the islands first described appear to be the homes of very few land birds, and one often comes across a regretful note by the author to this effect. Farther on in the book, these more generally popular types come in for their full share of notice.

The scientific names of the more important birds and other vertebrates which were secured are given, either in the text or in foot-notes; and one's only regret in reading through the book was, that so few names of insects were given. To an entomologist, though perhaps not to an exclusive ornithologist, a recognition of the species observed would have made the narrative more real. The 220 beautiful illustrations and four sketch-maps leave nothing to be desired, Mr. Meade-Waldo's photographs are excellent. Those of our members who perused with pleasure this ornithologist's delightful articles on "Birds seen during the Cruise of the 'Valhalla' in 1905-6," which appeared in vols. IV. and V. of the present series of our Magazine, will eagerly study the fuller account in Mr. Nicoll's fascinating book.

A. G. B.

# BRITISH BIRDS.

The March number of this publication begins with an interesting article by William Farren, on the crouching habit of the Stone-Curlew: four admirable reproductions of photographs of the young at various ages, crouching amongst different surroundings, accompany this paper, which is a valuable addition to the many recorded cases of protective assimilation in nature; Dr. N. F. Ticehurst describes some bird remains from the Broch of Ayre, Orkney; Major F. W. Proctor gives us some further information touching the Lesser Redpole as a breeding species in Berkshire; Messrs. H. F. Witherby and N. F. Ticehurst continue their account of the more important additions to our knowledge of British Birds since 1899, and various notes complete the number; among the latter an instance of three Cuckoo's eggs in a Robin's nest and a clutch of seven eggs in the Great Crested Grebe's nest are perhaps the most noteworthy; four seems to be the usual number to a clutch, five being a rare number, yet it seems odd that two hens of this quarrelsome species should lay in one nest.

## THE EMU.

The January part of this important publication provides us with an admirable photographic portrait of Colonel-Surgeon C. S. Ryan, the third President of the A.O.U.; it commences with an account of the proceedings of the seventh session of the Union, the Balance Sheet for the year, the address of the Vice-President, on the subject of Bird Protection; the Report of the Hon. Secretary; Notes by Robert Hall and John P. Rogers on a collection of birds from North West Anstralia; some notes on the location of birds in the vicinity of Homesteads, Break-o'-day District, Tasmania, by Colonel W. V. Legge; More notes about Herons, by A. H. E. Mattingley, with two excellent reproductions of nests with eggs and young of *Nycticorax caledonicus*: a number of short notes on various subjects; two Reviews; Notices of Meetings, and lastly an excellent reproduction of the portrait of the late Professor Alfred Newton which was published in the October number of British Birds: altogether this number condenses a considerable amount of information into a very limited space.

## CORRESPONDENCE, NOTES, ETC.

## MESSRS. PAYNE AND WALLACE'S COLLECTION.

During a short stay in Western Australia I took the opportunity of calling on Mr. Wallace in Freemantle to see his collection of living birds, etc., which, all being well, should reach England some time in April. Our members may like to hear what the collection consists of.

I was particularly pleased to see a fine lot of Pileated Parrakeets (*Porphyrocephalus spurius*), all in splendid condition. This is certainly one of the most beautiful of all of the Parrakeets. Next the Stanleys (*Platycercus icterus*) attracted my attention. There was a fine group of these, all looking very fit, and in much redder plumage than those that Mr. Wallace took home last year, which is strange, as these are evidently mostly young birds.

Then there were several pairs of the rare Rock Grass Parrakeet (*Neophema petrophila*), and one or two Elegants amongst them. About ten pairs of Crimson-wings, a few "Twenty-eights," three Orange-naped Lorikeets (*Trichoglossus rubritorques*), and a very nice young Western Black Cockatoo completed the Parrots.

The Grassfinches were a fine lot, consisting of Painted (*Emblema picta*), Crimson (*Neochmia phaeon*), Gouldians, Masked, Longtailed, Star, Ringed, and a few *Munia pectoralis*. Not a single specimen of *M. flaviprymna*, which Mr. Wallace tells me he has not met with this trip.

Two species of Honey-eaters are included in this collection, namely, one of the Friar Birds and the Garrulous Honey-eater. Some nice Hawks, Sacred and Red-rumped Kingfishers, one specimen of the large Buff-breasted Kingfisher (*Dacelo cervina*), two Owls, six Emus, Brush Bronze-wings, Peaceful, Bar-shouldered, Diamond and Plumed Doves complete the list of birds so far as my notes go, but Mr. Wallace tells me he hopes to get several more birds before he sails. Besides the birds I noticed several Kangaroos, Wallabies and Lizards.

All appeared to be in perfect condition, and I saw ample evidence of the great care that is bestowed by Mr. Wallace upon his live stock, and he has my best wishes for a very successful trip home with his stock.

Freemantle, Western Australia,

D. SETH-SMITH.

Jan. 25th, 1908.

## SUGGESTION OF THE COUNCIL.

SIR,—Referring to the suggestion contained in the March number of the *Avicultural Magazine* that the usefulness of the Magazine could be increased if articles were published dealing with the general management of groups of birds in confined spaces, and asking for the opinion of mem-

bers on the subject; I cannot help thinking that such articles would be immensely popular, and would not only increase the sphere of usefulness of the Magazine but bring new members to the Society.

Of the existing members of the Society there are, no doubt, several experts in many different classes of birds, and many more members who have knowledge of one class of bird only and would like to extend that knowledge to other classes.

Probably, however, the bulk of the members are those who, like myself, are genuinely interested in bird life without pretending to have any special knowledge about any class of birds whatever. To such persons the articles suggested would be of immense utility.

There is no doubt that a good deal of time and money is often wasted by amateurs in misdirected efforts, which could have been prevented had certain information within the knowledge of many experts been imparted, and I gather that it is with the intention of imparting such information that the articles are suggested.

A series of articles on different classes of birds, similar to Mr. Frank Finn's little book on "Fancy Pheasants" (which originally appeared in the *Feathered World*), would be invaluable, even if the articles had to be somewhat shortened owing to limited space.

To mention a few birds which specially interest me, I do not suppose that many people have had an opportunity of getting to know, except by dearly-bought experience, the immense difficulties of keeping curlew, whimbrel, spoonbills, egrets, little bittern and Thick-knee plover for any length of time; whereas, on the other hand, some of the so-called waders are admittedly very easy to keep, and others not difficult, if only they can be obtained.

In writing as above I am not in any way wishing to detract from the merits of the Magazine on its present lines, but am merely emphasising the fact that an article for beginners might appear in each number of the Magazine without unduly encroaching on the space usually devoted to those further advanced in aviculture.

Even if the Magazine had to be slightly enlarged the increased membership should pay for the extra cost. It is usually a sound business practice to cater for all classes.

C. BARNBY SMITH.

---

SIR,—As our Council has asked for the opinion of members, especially I think our younger and less experienced members like myself regarding the publication of a number of articles in the *Avicultural Magazine* on groups of birds, say for example Waxbills, Tanagers or small Parrakeets, these papers to give very fully the best methods of feeding in cages and in the aviary,

what birds to mix with and the best information about breeding in captivity. I think a great number of your members would find something of the above nature most useful.

These papers it is proposed to reprint in pamphlet form and they might be sold for the benefit of the Illustration Fund; they would form a first-rate asset to the Society, for people who cannot afford to get all the back volumes or do not want the bother of looking up the volume; or again others who are not members but take an interest in our hobby might buy these papers and get them bound separately.

I believe a number of our articles on different species that appear from time to time might be made more useful if more space were given to directions about feeding, etc.; besides the long descriptions, which though useful are rather tiresome reading, a small woodcut would answer the purpose of making them much more interesting. I would like to suggest that measurements of cages should be given where possible.

Later on if this plan now proposed works well we might have a few papers describing the construction and erection of aviaries with a note of the cost of material, this I am sure would be welcomed by those who are about to construct an aviary, besides a member often designs some little contrivance which is quite an original idea, which would be most acceptable to others who perhaps have not such a capacity for working out ideas.\*

W. H. WORKMAN, M.B.O.U.

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#### ANOTHER SPECIMEN OF THE RACQUET-TAILED PARROT (*Prioniturus platurus*).

SIR,—Mr. Thorpe sent me in March a beautiful specimen of this interesting and lovely species.

It is a male, which shows me that the coloured plate in our Magazine (N.S., vol. I., 1902-3, p. 344) is that of a *female*, unless it be that of a young male. At any rate it is not an adult male.

My bird has a patch on the head of pale pink and silvery grey, a very defined collar on the upper part of the back, below the neck, of 'old' gold the forehead, face, and breast are a very beautiful emerald green, and the whole of the shoulders and wing-coverts are silvery grey-green; being much more extensive than in the coloured plate.

Whereas the female of this species is mostly of a pale green colour, lacking the pink and grey patch on the head, etc.

I should like to know whether a female was figured intentionally, and if so, why its sex was not mentioned.

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\* When my new book on foreign Cage-birds is completed, I think Mr. Workman will find therein most of what he requires in the case of extra-European species: I hope to see the first volume published this year.—A. G. B.



I am feeding my bird on canary and millet seed, with fruit such as grapes, banana, and apple. He also has water to drink. I trust he will thrive, but previous experiences with this species of parrot by others, rather make me nervous.

HUBERT D. ASTLEY.

#### WHAT SPECIES OF MOCKING BIRD?

SIR,—May I ask the assistance of a member of the Society in identifying my Mocking Bird? Until I saw what are written down as Saturnine Mocking Birds at our Zoological Gardens, in the Western Aviaries, I had supposed him to be that; but he is larger and his underparts are pale sandy buff; his upper parts brown, not at all grey, and there is a very distinct fawnish white stripe over the eyes, with a dark brown one through them from the nostrils to the ears.

The greater and lesser wing coverts have each feather finely edged with pale whitish fawn, and there is a spot of such colour at the extremity of each feather; the secondaries are rather broadly edged with brownish fawn, and the primaries with whitish.

The central tail feathers are brown, the outer ones white, with dark brown bases.

I took him last year to the Natural History Museum at South Kensington, and on comparison with the skins there one certainly thought him to be *Mimus saturninus*, but if those birds in the Western Aviaries are so, he is not.

Several of the Mocking Birds, and there are a goodly number, bear a strong family resemblance to each other, and skins in such a case are but poor things by which to identify a living bird, for all the shape and very often half the colouring, has gone.

My bird is an inhabitant of Argentina, and a most gay and charming songster.

HUBERT D. ASTLEY.

#### WOOD-SWALLOWS KILLING MICE.

SIR,—Mr. Brooks account of his Wood Swallows killing mice is very interesting. A Pied Rock Thrush (*M. saxatilis*) in an aviary at home is a confirmed mouse killer and, when small enough, beats them about, swallows them, and ejects the hair, bones, etc. like a Hawk or Owl.

E. G. B. MEADE-WALDO.

#### THE TROPICAL SEED FINCH.

SIR,—I have had a slight experience in keeping the two Tropical Seed Finches *Oryzoborus torridus* and *Oryzoborus crassirostris*. Both appear to be very popular cage birds in South America, and *O. crassirostris* has a reputation as a songster. Those I had sang a good deal—a low inward song. *O. torridus* was an extremely tame little bird: nothing seemed to frighten

it; beyond fanning its tail it never betrayed any emotion when carried about in an open cage or when a big dog snelt at it.

*O. crassirostris* were much wilder. They seemed very hardy: I left them in a large open aviary until November, and when taken in they both accomplished a very rapid and complete moult. I never saw either species touch anything but canary seed and paddy rice. When caged they would not look at mealworms or any form of green food. In a large aviary—with a good deal of natural food in it—it is hard to say exactly what they do eat. I can answer for their biting power as they nearly cut pieces out of my fingers when I was obliged to handle them. These are now in the New Bird House in the Zoological Gardens, where I heard them singing on Sunday last.

E. G. B. MEADE-WALDO.

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## POST MORTEM EXAMINATIONS.

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Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lanherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, *and a fee of 1/- for each bird*. If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons and Canaries can only be reported on by post.

---

HILL-MYNAH. Bronchial catarrh. There were marked evidences of pneumonia as the left lung was quite consolidated. This seems to have been of long standing.

### III.

#### NOTICES TO MEMBERS—(Continued from page ii. of cover).

##### NEW MEMBERS.

Mr. J. R. LEECH; Bryn Ivor, Abertillery, Mon.  
 Mrs. LONGDON; Arreton, Epsom Road, Guildford, Surrey.  
 Captain JOHN SHERARD REEVE; Leadenham House, Lincoln.  
 Mr. CLAUD MAGNIAC; The Cottage, Ashtread Park, Leatherhead.  
 Mr. JOHN THOMSON; Powder Mill Lane, Waltham Abbey, Essex.  
 Miss RIPLEY; Bedstone, Bucknell, Salop.

##### CANDIDATES FOR ELECTION.

Mr. EDWARD W. GIFFORD, Assistant-Curator of Ornithology, California;  
 Academy of Sciences, San Francisco.  
*Proposed by* Dr. FREDERICK W. D'EVELYN.  
 Mr. ALFRED BARLOW; Superintendent, Alexandra Park, Oldham.  
*Proposed by* Mr. FRANK HARRIS.  
 Mr. H. ROBBINS; 25, Campden Hill Square, W.  
*Proposed by* Mr. ALLEN SILVER.

The following misprints appeared on page III. of last month's cover.  
 Line 10 from top, for Lincoln read Lincoln; line 16, for BEDSTON read  
 BEDSTONE; also the "Mr." in front of HENRY SCHERREN at line 7 should  
 either have been omitted or been made general.

##### CHANGE OF ADDRESS.

Mr. J. D. SORNBORGER; to Rowley, Massachusetts.  
 Capt. J. W. H. SEPPINGS; to the Army Accounts Office, Cork, Ireland.  
 Mr. H. C. MARTIN; to 147, Victoria Road, Old Charlton.  
 Mr. W. L. SCLATER; to El Paso Club, Colorado Springs, Colorado, U.S.A.

##### MEMBERS' SALE AND EXCHANGE COLUMN.

*The charge for private advertisements is SIXPENCE FOR EIGHTEEN  
 WORDS OR LESS. and one penny for every additional three words or less.  
 Advertisements must reach the EDITOR on or before the 26th of the  
 month. The Council reserve the right of refusing any advertisement  
 they may consider undesirable.*

Pairs—Orange-flanked Parakeets 35/-; Quail-finches 30/-; Harlequin Quails  
 £1, Pectoralis 7/6; Ruficauda, little rough in plumage 10/-; one Yellow-  
 rump 5/-. NICHOLAS O'REILLY, 9, Royal Crescent, Ramsgate, Kent.

Blue-bonnet from out-door aviary, 25/-.

Hon. & Rev. Canon DUTTON, Bibury Vicarage, Fairford.  
 Pair Pileated Finches 7/6 each; do not agree together.

SICH, Bepton Rectory, Midhurst.  
 Pairs—Pintail 13/6; Teal 10/-; Wigeon 10/6.

H. WORMALD, Heathfield, East Dereham, Norfolk.  
 Pair of Virginian Nightingales, in garden aviary since June, £3 10/-; cock  
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Mrs. H. WILLIAMS, Oatlands, Bromley, Kent.  
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##### WANTS.

*The charge for members' advertisements under this heading is FOUR  
 PENCE FOR TWELVE WORDS or under, and one penny for every additional  
 three words or less.*

Wanted—Cocks Liothrix, Masked Grassfinch, Long-tailed Grassfinch.

SICH, Bepton Rectory, Midhurst, Sussex.

Wanted—Two cock Blue Robins, or will exchange hen for cock; also hen  
 adult Many-colored Parakeet, acclimatized.

HAWKE, Wighill, Tadcaster.

Wanted—Pekin Robin, songster, and pair adult Rosellas from outdoor  
 aviary.

Miss E. CROWFOOT, Blyburgate House, Beccles.

Wanted—A Green Cardinal hen.

Miss M. SHARP, Spring Gardens, Ringwood.

**JOHN D. HAMLYN,**  
**NATURALIST,**  
**221, St. George's Street East, London.**

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## THE JOURNAL OF THE AVICULTURAL SOCIETY.

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NOTE.—A new volume commences every November.

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should be sent to the Honorary Business Secretary.

## THE AVICULTURAL SOCIETY.



Persons wishing to join the AVICULTURAL SOCIETY are requested to communicate with either of the Hon. Secretaries or the Editor.

### NOTICES TO MEMBERS.

The Subscription to the Avicultural Society is 10/- per annum, due on the 1st of November in each year, and is payable in advance. The entrance fee is 10/6. The *Avicultural Magazine* is sent free to members monthly. Members joining at any time during the year are entitled to the back numbers for the current year, on the payment of entrance fee and subscription.

*All MSS. for publication in the Magazine, Books for Review, and Private Advertisements* should be addressed to the Editor, *pro. tem.*, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent.

*All Queries respecting Birds* (except *post mortem* cases) should be addressed to the Honorary Correspondence Secretary, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent.

*All other correspondence, and Subscriptions*, should be sent to the Honorary Business Secretary, Mr. T. H. NEWMAN, Newlands, Harrowdene Road, Wembley, Middlesex. Any change of address should be at once notified to him.

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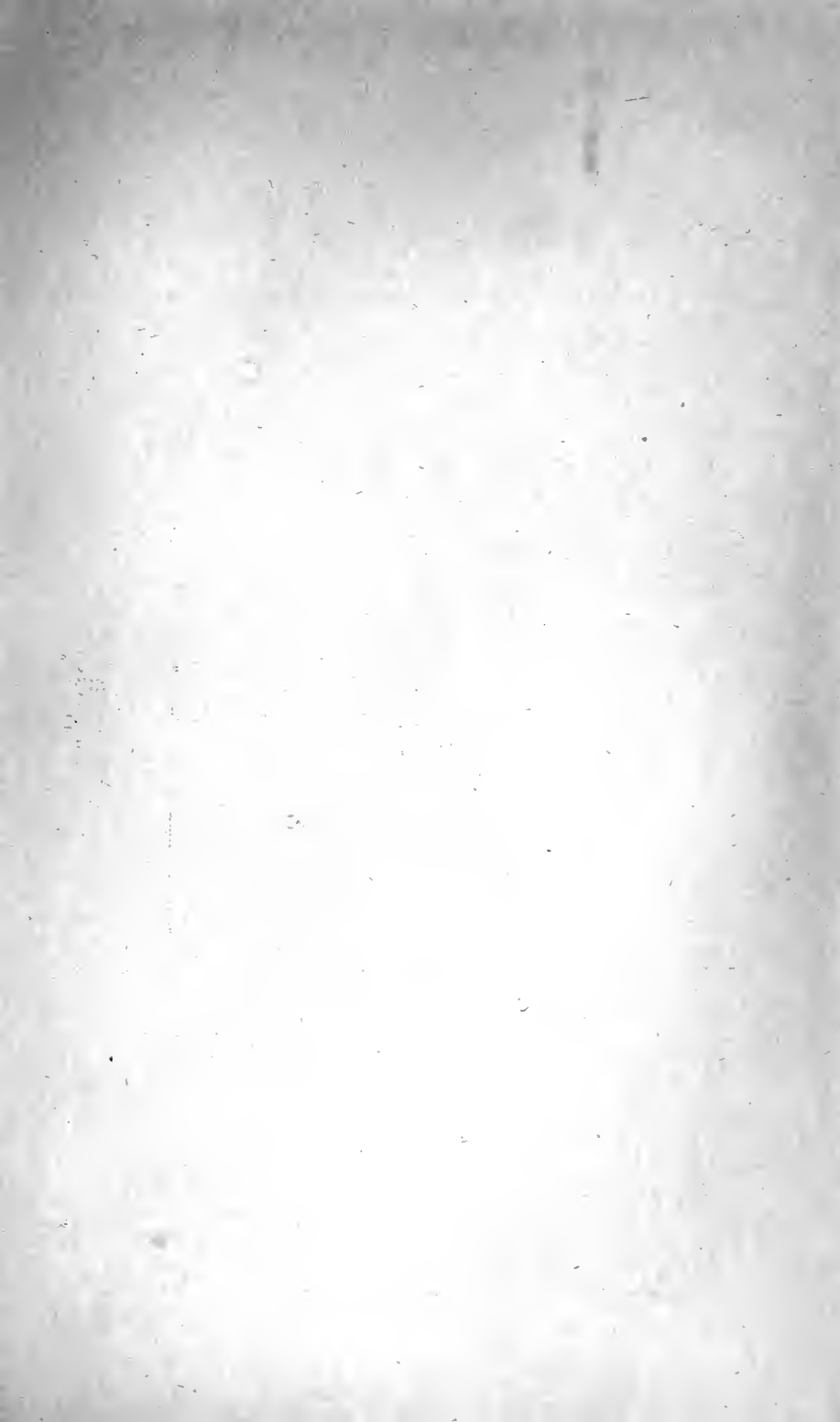
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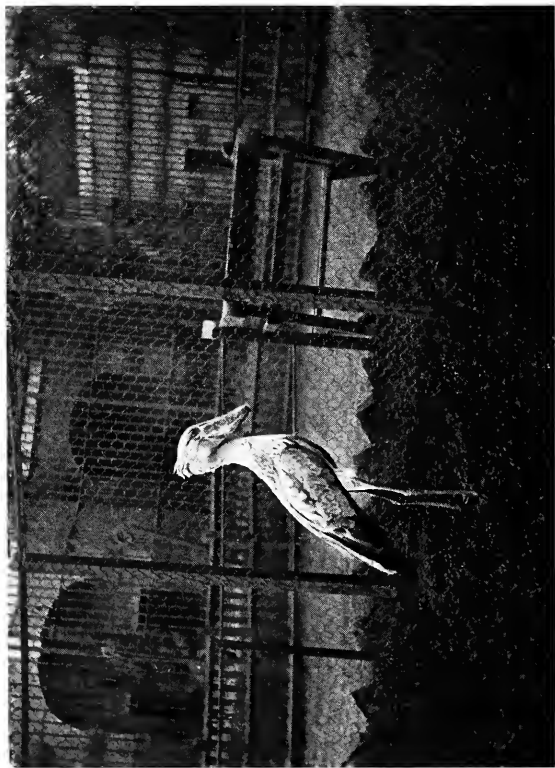
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(Continued on page iii. of cover).





Capt. S. S. Flower, photo.

WHALE-HEADED STORK.  
*Balaeniceps rex*



# Avicultural Magazine,

BEING THE JOURNAL OF THE  
AVICULTURAL SOCIETY.

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MAY, 1908.

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## THE SHOEBILL.

*Balaeniceps rex.*

By Capt. STANLEY S. FLOWER.

- |                  |               |
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I. HISTORY. On the 15th of December 1840, the German traveller, Ferdinand Werne, was asleep in the sudd-country south of Lake No, and on awakening was told by his Berberine hunters that they had seen an extraordinary bird, as big as a young camel, with a bill like a Pelican's, though wanting a pouch. This was apparently the first time the existence of the Shoebill was made known to any European.

In 1848 Baron F. W. von Müller saw two of these birds alive, but was unable to secure them. On his return to Khartoum he saw two skins of the Shoebill, for which a high price was asked, in the possession of the Italian trader Nicola Ulivi; these were eventually purchased by Mr. Mansfield Parkyns, of Nottingham.

On the 14th of January, 1851, at a Meeting of the Zoological Society of London, Prof. (afterwards Sir Richard) Owen being in the chair, Mr. John Gould read a paper "On a new and most remarkable form in Ornithology;" and for the "most extraordinary bird" brought to England by Mr. Parkyns proposed the generic name of *Balaeniceps*, and the specific name of *Rex*.

The bird being now known to the scientific world, and wanted for museums, rewards were offered to the elephant hunters of the White Nile to obtain specimens: but apparently no more reached Khartoum till, in 1854, the French traders, de Malzac and Vaissière, who had been accompanied on the White Nile by an experienced native collector of von Heuglin's, brought in five skins, and about the same time the party of the traveller Barthelemy obtained two more.

Two live Shoebills were purchased by the Zoological Society of London in April 1860 (P.Z.S. 1860, p. 243) from Mr. John Petherick, trader and British Consul at Khartoum, who had obtained them in the Sudan, having hatched them from eggs "procured from the Raik negroes....at a considerable distance from Gaba Shambyl"; these two were the survivors "out of six *Balaeniceps* shipped at Khartoum, but perhaps out of a score partially reared" (see P.Z.S. 1860, pp. 195-199). These were the first specimens of this most extraordinary bird ever brought alive out of the Sudan and, as far as is known, no others have been since, except the three individuals now living in the Giza Zoological Gardens, which I brought down the Nile in 1902, forty two years later than Petherick brought his and under much easier circumstances.

Between 1854 and 1884 a certain number of skins of the Shoebill were taken to Europe, but even now, in 1908, this bird is one of the *desiderata* of many large museums.

The Mahdist insurrection closed the Sudan to scientific research for many years, but after the final defeat of the dervishes at Om Debrikat, 24th of November, 1899, Lord Cromer, who took great interest in the zoology of the Sudan, suggested that information should be collected about this little-known and interesting bird, and if possible a skin obtained.

On the morning of the 30th of March, 1900, while the Gun-boat "Abu Klea" was exploring Lake Ambadi in the Bahr-el-Ghazal, Mr. Cecil Crawley, with a .303 rifle, shot a Shoebill, which I made a skin of: the work occupied nearly the whole day in a damp heat of 97° Fahrenheit; this, presumably the first Shoebill obtained by the present generation, was naturally an object of great interest to all on board. The following afternoon a fire

broke out on the "Abu Klea," but, owing to the well-disciplined crew and soldiers on board, was fortunately extinguished before any serious damage was done: the Shoebill skin had been hanging to dry under the quarter-deck awnings, which were completely burnt, and my relief can be imagined when it was subsequently found, little the worse but for soot and water and scorched feet. This skin eventually reached Cairo in safety, and Lord Cromer had it mounted by Rowland Ward & Co.

Other members of the same expedition, Capt. H. N. Dunn, R.A.M.C. and Lieut. W. B. Drury, R.N. also succeeded in obtaining specimens of the Shoebill; and in, I believe, the same year, 1900, the late Mr. W. G. Doggett shot some near Entebbe, in Uganda.

When the Sudan Game Preservation Ordinance came into force the Shoebill was, very properly, made a protected species, and remains so; and the bird has also Government protection in the territories of Uganda.

More than one person has told me that the Shoebill must have been known to the ancient Egyptians, as it was represented in their mural paintings at Sakkara or Beni-Hassan. In the former locality I have so far been unable to find any representation of a bird that could be referred to this species, the latter locality I have had no opportunity of visiting.

\* \* \*

2. NAME. Throughout the animal kingdom there have been, and are, great differences of opinion among specialists as to the most correct scientific names for the various species; fortunately in the case of the subject of the present article, all authorities appear to agree, and call the bird *Balaeniceps rex*: Gould.

In English it is called the Shoebill or Whale-headed Stork: apparently no popular French name is in use as in Prof. Perrier's recently published "*La Vie des Animaux.*" Monsieur Julien Salmon ("*Les Oiseaux*," II. p. 275) merely translates the scientific name, calling the bird "*Le Baléniceps roi.*" Its application in German is "*Der Schuhschnabel.*"

Its Arabic name is "*Abu markûb*," literally "*Father of a slipper*"; the upper mandible resembling in form, but inverted,

a roomy but hook-pointed form of slipper in common use in the Nile valley.

\* \* \*

3. CAPTIVITY. As mentioned above, the Zoological Society of London received two Shoebills in April, 1860; one died soon after its arrival. At the meeting of the Society on the 26th of June, 1860, W. K. Parker read a paper on its Osteology; the second lived less than one year in London. At the meeting on the 26th of March, 1861, A. D. Bartlett referred to "the death of the survivor of the two birds brought home by Mr. Consul Petherick."

Over forty years passed without anyone having the opportunity of seeing one of these great birds in captivity; and then, in the autumn of 1901, the late Col. W. S. Sparkes, C.M.G., brought one from the Bahr-el-Ghazal, where he had captured it by tipping its wing with a rifle shot, alive to Khartoum, where it is still living in the Governor General's Palace Garden, and is a source of great interest to Sir Reginald and Lady Wingate and their guests.

Early in 1902, the late Lieut. H. L. H. Fell, R.N., who had been in command of the Gunboat "Abu Klea" when we got the skin of a Shoebill on Lake Ambadi in 1900, and had very kindly promised to try to get me live specimens, obtained four nestlings from natives on the Bahr-el-Djur, in the Bahr-el-Ghazal province. "One unfortunately died of suffocation, caused by a bunch of threadworms passing up into its throat" (A. L. Butler, *Ibis*, 1905, p. 376). Of the survivors Lieut. Fell presented two to the Giza Zoological Gardens, and one to Maj.-Gen. Sir Rudolph von Slatin Pasha, K.C.M.G., who was so good as to present his bird also to the institution under my care.

Mr. A. L. Butler, Superintendent Sudan Game Preservation Department, brought one of these birds down the White Nile to Khartoum, and very kindly looked after all three of them in his house there, till on the 15th of May, 1902, I was ready to leave Khartoum for Cairo and took the Shoebills into my charge.

Four very good photographs of one of these young Shoebills when in Khartoum, taken by Mr. W. L. S. Loat, at that time Inspector of Nile Fish, were reproduced in Hutchinson & Co.'s "Animal Life," Vol. I., 1902-3, p. 159.

The journey from Khartoum North to Wadi Halfa by goods train was more interesting than pleasant. The three Shoebills were by no means my only care; with the assistance of some of the Egyptian keepers from Giza I had also to look after four Giraffes, nine valuable Antelopes, a Nuer Ox, some Sheep and Goats, a Lion, a Leopard, three Servals, a Caracal-Lynx, two Chitas, two Genet-Cats, two Porcupines, an Ant-bear, an Eagle, five Secretary Birds, four Geese, a Brahminy Duck, four Cranes, two Ostriches, five Tortoises and a Crocodile.

The truck in which the Shoebills (and I) travelled had a single roof of corrugated iron, and became unpleasantly warm. I do not know what the temperature rose to in that truck, but the day we passed Berber I was told that the thermometer in the shade was 118° Fahrenheit. The Shoebills required much coaxing to feed under the new conditions of a railway journey, and repeatedly deposited their once, or more often, swallowed food on the truck floor; the result being that during the latter part of the journey I was constantly reminded of the remark of Trincule "a very ancient and fish-like smell."

By telegraphing beforehand I had tried to arrange for a supply of fresh-caught Nile fish to be ready at the principal stations near the river: on one stage no fish being forthcoming I was reduced to feeding the Shoebills on tinned prawns.

At Wadi Halfa the ruminant animals (although in good health and free from infection) were subjected to the formality of twenty-one days quarantine; so I left them with their keepers to be fetched later, and with the remainder of my collection, including the Shoebills, took steamer to Shellal (Aswan). From Shellal we travelled by the narrow gauge railway to Luxor, and from Luxor to Cairo comfortably by express train, reaching Giza on the 28th of May, 1902; so that now (20th March, 1908) these three Shoebills have been five years, nine months and twenty-three days in captivity at the Giza Gardens, and fortunately appear to be all still thriving.

\* \* \*

4. AFFINITIES. Gould wrote: "This is evidently the Grallatorial type of the *Pelecanidae*." Other ornithologists considered it the African representative of the South American

Boatbill *Cancroma*. Prof. J. Reinhardt, of Copenhagen, in 1860 (P.Z.S., p. 377) pointed out the affinity of the Shoebill to the equally African Umbre *Scopus*. Mr. F. E. Beddard in 1888 (P.Z.S., p 284) wrote a very useful paper, which should be carefully read by all interested in the subject, on the affinities of this bird, which he regarded "as a most aberrant Heron, having no near affinities to the Storks nor to *Scopus*."

Dr. Bowdler Sharpe in Volume XXVI. of the British Museum Catalogue of Birds, and in his latest Handlist of Birds, places the Shoebill the sole representative of the family *Balaenicipitidae*, between the Herons *Ardeidae* on the one hand, and the Umbre *Scopidae* and the Storks *Ciconiidae* on the other.

Personally I provisionally consider the Shoebill an aberrant Heron, which in bygone ages, from what cause we know not, having deviated from the ancestors of the modern Herons, Night Herons and Egrets, has continued to develop on a line of its own till it has reached its present extraordinary form. In the marshes where it exists the peculiar conditions of the country allow of its continuance, but it is easy to imagine how a geologically small elevation of the earth's surface and consequent drainage of the marshes would quickly cause the extinction of the species, now too specialized to be able to adapt itself to changed conditions of life.

However the anatomy and development of the Shoebill is still not fully known, and I would be sorry to make a definite statement of its affinities and systematic position without consulting, which I have not had the opportunity of doing, Mr. W. P. Pycraft who, in the last few years, has done so much to place ornithology on a more scientific basis.

Mr. A. L. Butler in his excellent paper on the Ornithology of the Egyptian Sudan (*Ibis*, July 1905, pp. 301-403) gives far the best account of the Shoebill yet published, and mentions a specimen with "distinct, but irregular and not very deep, pectinations on the middle claws," and thus concludes:—"In its solitary nature, its motionless watching for its prey, and the nature of its food, as in the colour of its plumage and the presence of 'powder-down' patches, *Balaeniceps* is a Heron, though an aberrant one, and seems to have little affinity with the Storks."

## 5. DISTRIBUTION.

*General.* North Equatorial Africa, very local.

*Particular.* In the Egyptian Sudan the Shoebill is found in the swamps of the Bahr-el-Ghazal, from Lake No to Lake Ambadi, Meshra-el-Rek and the Bahr-el-Djur; and also in the somewhat similar swamps of the Bahr-el-Gebel between Lake No and Schambé (See P.Z.S. 1900 p. 963).

Von Heuglin in 1873 pointed out that this bird would probably be also found to occur in the swamp regions of the Victoria Nyanza and Lake Chad; I do not know if its occurrence has been confirmed in this locality, but it has been so in the Victoria Nyanza. Sir Henry Johnston, G.C.M.G. "The Uganda Protectorate," 1904, I. p. 404) writes that *Balaeniceps* is "quite common in the creeks close to the Government station at Entebbe," and adds in a footnote that he believes he has himself seen (in 1882) this bird in the marshes of the Kunene in South West Africa, and that Sir Henry Stanley asserts it is found on the Upper Congo.

\* \* \*

6. SIZE. The Shoebill generally stands nearly four feet high, but at times will stretch itself to almost five feet. The extent from tip to tip of the wings of the specimen I measured in the Bahr-el-Ghazal was eight feet and six inches.

The length from the point of the bill to the extremity of the tail is given as about 46 inches in the British Museum Catalogue. The female measured by A. L. Butler was 47 inches; the bird I measured was 51 inches, and Gould's type 52 inches. It is possible there is a difference in size in the sexes. Von Heuglin ("Ornithologie Nord-ost Afrika's," 1873, p. 1096) says: "The male is considerably larger than the female."

The length from the point of the bill to the end of the claw of the centre toe was 67 inches both in Gould's and in my specimen.

The great bill in my specimen was nine inches in a straight line from gape to tip, and the culmen ten inches following the curve to the tip; the width of the bill at the base following the curve of the upper mandible was ten inches.

The wing is 26 to 30 inches in length; the tail 10 to 12½ inches; the tibia 13 to 15 inches; the tarsus 10 to 12½ inches.

7. COLOUR. The description in the British Museum Catalogue gives no idea of the beautiful colour of a live Shoebill. I have noticed that visitors on seeing for the first time one of these birds in the Giza Gardens frequently at once exclaim "What is that beautiful blue bird?" and then afterwards "What an extraordinary large beak it has got." The colour being evidently the most striking feature.

The following description is drawn up from the three birds now (March 1908) living at Giza.

General colour a lovely pale blue-grey, more blue than grey in the sunlight, most of the feathers with a narrow white margin, the large feathers of the wings and tail are a slightly darker blue-grey; the under surfaces are paler than the upper, the abdomen and under tail-coverts the lightest; the front and sides of the neck are ornamented by elongated pale blue-grey plumes with dark-grey centres.

The bill is horn-coloured but streaked and spotted with grey, almost of the same shade as the grey of the bird's feathers; the legs and feet are bluish grey (black in skins); the claws are black; the bare anterior space between the rami of the lower mandible is pinkish grey.

Iris pale yellow: the white nictitating membrane is very frequently passed over the surface of the eye.

The inside of the mouth and the little tongue are pink flesh-colour.

A. L. Butler writes: "Nestlings are covered with grey down of a fulvous tinge."

\* \* \*

8. VOICE. Although silent for hours on end, at times the Shoebills can be very noisy birds. Ours in captivity when alarmed or angry utter a shrill kite-like cry; when pleased they have a half-laughing, half-choking voice which may be rendered "choua, choua, choua, choua"; and they also indulge in bill-snapping, making a regularly timed noise like the tapping sound of a machine gun in action. As A. L. Butler says (in his *Ibis* paper mentioned above) this clattering of the bill is "the only Stork-like trait" which *Balaeniceps* in captivity shews.

\* \* \*



9. HABITS. Very little is known for certain about its habits ; the account in most books as, for instance, the " Royal Natural History " (Vol. IV., pp. 303-4, 1895) is taken from Heuglin, and even the late Prof. Newton in his " Dictionary of Birds," p. 839, says that Petherick " discovered its mode of nidification." From Heuglin's own account it appears his information about the Shoebill was mainly based on native reports, he appears never to have himself examined a specimen alive or in the flesh, and only to have observed a few in a wild state near Lake Ambadi.

Petherick's account (P.Z.S. 1860, pp. 195-198) is interesting to read, but, I wish to remark, requires confirmation and, to quote my clever old friend and former instructor the late Mr. A. D. Bartlett, " I do so with considerable uneasiness lest I should be accused of casting a doubt upon the veracity of the gentleman to whom we are indebted for the first living specimens of this rare bird " (see P.Z.S. 1861, p. 134).

In many pictures of Shoebills in books of natural history and travel the bird is represented as walking in the water, a most unusual thing for a Shoebill to do. Of over sixty specimens of *Balaeniceps* that I have seen in a wild state, I do not recollect seeing one in the water. A. L. Butler writes: " I never saw the bird actually wading in water."

The Shoebills at Giza are kept in a large green paddock, three hundred and twenty four and a quarter yards (296.5 metres) in circumference, provided with a small pond and also a piece of artificially swamped ground, when walking about they always carefully avoid the swamp, deliberately walking round the dry edge. In over five and a half years my wife and I have only twice seen a Shoebill in the pond, and in eighteen months Mr. M. J. Nicoll tells me he has only once seen the same sight ; we did not see the bird enter the pond, and think that most probably on each of these three occasions it had accidentally fallen in. Of the Khartoum specimen Mr. A. L. Butler writes: " This individual shews no disposition whatever to enter water, and seems to prefer the driest and sunniest spots in the garden."

The birds in captivity are very morose and somewhat quarrelsome ; fierce fights have taken place between them, but

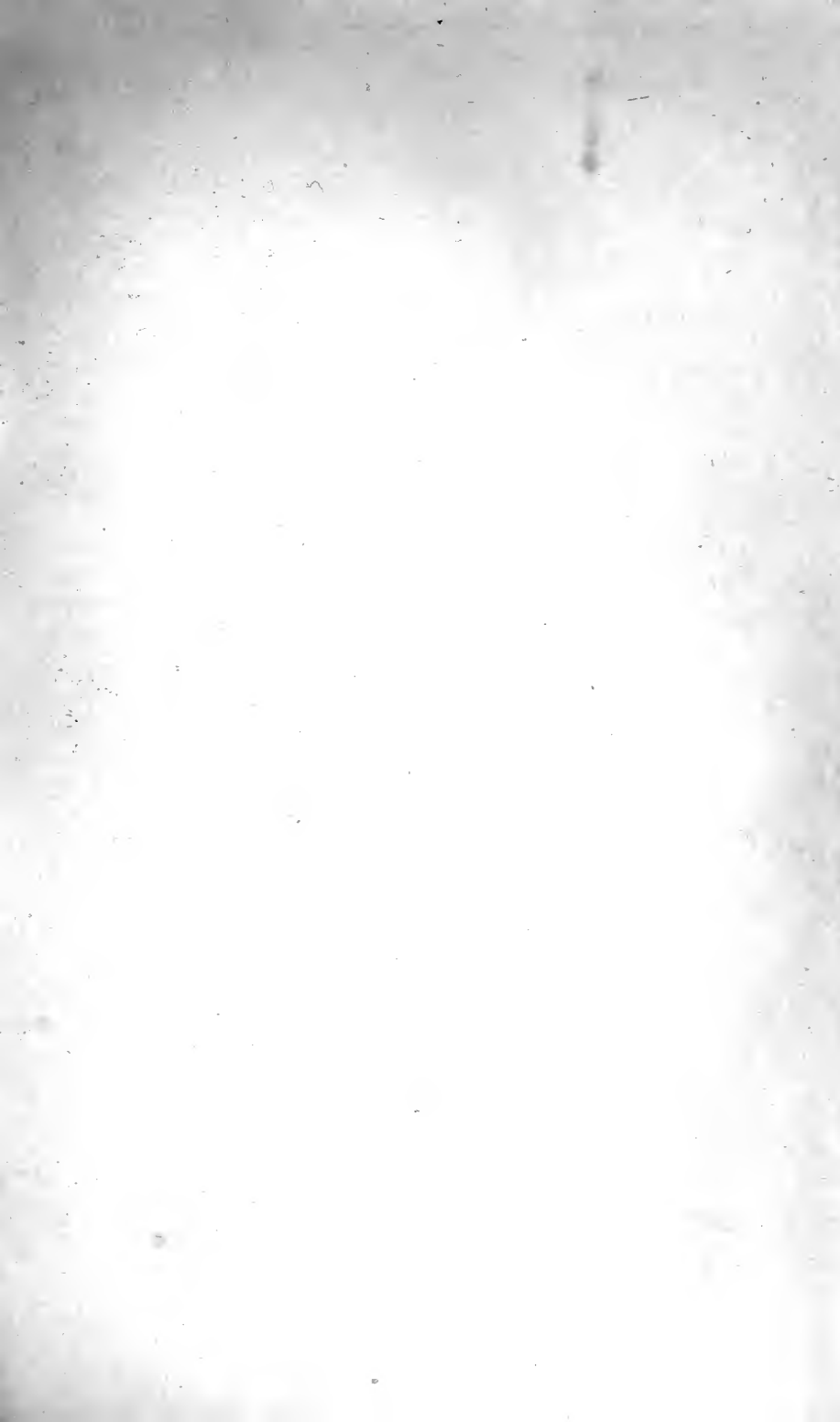
as a rule each Shoebill ignores the presence of the others, and all three birds stand as far apart from each other as the limits of their paddock allow.

The Shoebill is capable of inflicting a very powerful bite, and is by no means a safe bird for a stranger ignorant of its ways to approach, a fact which we often have to impress on amateur photographers anxious to obtain "snap-shots" of *Balaeniceps* at close quarters. It has been amusing to see how rapidly in some cases their enthusiasm has waned, when (as requested) confronted with the great bird screaming shrill defiance and crouching as if about to spring, with gaping bill and half spread wings. On the other hand, to known friends the Shoebill can make himself quite amiable, and is evidently pleased by being taken notice of and talked to.

The point of the upper mandible is used to preen the feathers, and not, I believe, to open shell-fish as has been stated. A. L. Butler believes "the stories about *Balaeniceps* crushing shell-fish to be a myth."

In the Bahr-el-Ghazal we believe their food consists principally of fish, which forms their sole food in captivity. They have, as before remarked, an unpleasant habit of disgorging their food before finally swallowing and retaining it. Sometimes they occupy themselves pretending to eat a twig or large leaf, repeatedly picking it up and dropping it again.

The solitary and shy habits of this bird in a wild state have been noted by myself (P.Z.S., 1900, p. 963) and by A. L. Butler (*Ibis*, 1905, p. 374, etc.) In captivity one of our birds will occasionally perch on a low shrub in their paddock; they are not pinioned, but have some of the primary feathers of the left wing periodically cut, at times the cutting not having been done soon enough one or other of the birds has flown out of the paddock, but on these occasions they have never attempted to roost in the trees but have settled on other lawns in the Giza Gardens and been recaptured by stalking and then running them down before they had time to rise off the ground. I do not suppose that this would be possible in a really fully winged bird, nor would the nature of the ground they frequent in a wild state allow a man to run fast enough.





From life.

CRESTED WOOD PARTRIDGE.  
*Rollulus roul-roul.*

It should also be noted that the Shoebill does not frequently stand on one leg only, as is often stated.

\* \* \*

10. BREEDING. Our three birds have so far shown no inclination to breed, and we do not know their sexes. In a wild state our knowledge on this subject has been already well summarized by A. L. Butler: "The only first-hand information about its breeding habits which I have been able to obtain is from Col.-Sergt. Sears, Egyptian Army, who has been a good deal employed in sudd-cutting operations in this region. He tells me he has frequently seen the nests with young birds, on the plains inland from the Jur, at the end of March and beginning of April. He describes the nests as mere flattened-down spots in the high grass on dry ground; they were found singly and not in colonies, and contained one or two young only in each case. The eggs he had never seen."

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## THE CRESTED WOOD PARTRIDGE.

*Rollulus rouloul.*

By HUBERT D. ASTLEY, F.Z.S., M.B.O.U.

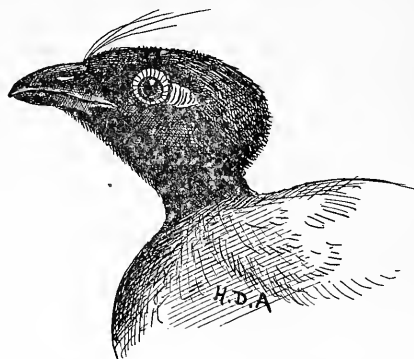
I considered myself fortunate in having a pair of this remarkable species sent me by Mr. Thorpe of Hedon, (near Hull), last February, but I proceeded to consider myself exactly the contrary when the hen bird died about a fortnight afterwards from disease of the lungs, which she must have contracted on her long journey from Borneo.

This Partridge—it is not of course a true Partridge—is about the size of the Californian Quail, perhaps slightly larger.

The male is a lustrous blue black with deep purple and green tints, 'reflections' they are styled, upon the lower back and tail coverts. The bill is dark, not exactly black; being red at the base of the lower mandible. The eyelids, and also the bare flesh behind the eyes, are brilliant scarlet, broadly serrated, and the legs and feet are red.

The wonderful crest, reminding one of the crest of the Crowned Crane, is of a bright maroon chestnut.

The female lacks the crest, although it is there in embryo. Her head and neck are dull dark grey, her whole body is a subdued moss green, and the general effect of the entire wing is chestnut. As a matter of fact the shoulders are that colour, the wing coverts are chestnut finely barred with black or dark brown, and the flight feathers have the inner webs dull chestnut brown, and the outer ones, light chestnut, spotted with brown. The hair-like bristles which spring from above the nostrils are very developed in the male, arching over the head and touching the forepart of the crest; but less so in the female. It is said that



FEMALE OF *R. ROULROUL*.

the young birds have a mixture of grey plumes in the breast; that is, full grown young ones; that the legs and red colour of the bill are much paler and more yellow, while the crest on the head is not nearly so long or developed.

The egg of this species is of a dull yellowish white. Diam. 1.25 inch. Axis. 1.55 inch.

This beautiful bird inhabits Borneo and Sumatra, the mountainous districts in Sarawak, etc.

Lieut. H. R. Kelham mentions one that had been snared by natives during his expedition on the Perak River in January, 1877. [*Vide Malay Ornithology, Ibis*, Vol. of 1881].

He also writes:—"Though not rare, this bird is seldom seen, being very shy, and on the approach of danger trusting to its legs rather than taking flight. All my specimens were snared in the neighbourhood of Kwala Kangsar."

"Captain Wardlaw Ramsay tells me he found it plentiful round Mount Ophir; and I saw several skins in Malaccan collections. These birds thrive well in confinement, but are not easily tamed; some which were in my aviary for several months, were always wild, hiding directly any one appeared in sight; but early in the morning, when all was quiet, and they thought they were not observed, they used to come out of their hiding places and feed on rice and Indian corn."

There are two native names given, probably being different in various districts. One is "Serookan," and Mr. C. Hose writing on the Avifauna of Mt. Dulit and the Baram districts, gives the name as 'Sengayan.' Whatever the native names may be, they certainly cannot go further than the Latin title *Rollulus roulroul* ! What next?

My male bird seems strong and healthy, but bears out Lieut. Kelham's description with regard to the shyness of the species. I let him loose in my bird-room at one time, where he scuttled about behind jugs and seed jars, etc., but in spite of the flight feathers being clipped off, always went up to roost, managing to fly on to a table and thence on to the top of a cage.

When roosting on a bough, the short tail is tucked under the rump, so that it almost touches the under tail-coverts.

The crest is immovable, and is composed of fine hair-like feathers, forming a compact coronet, not like that of a Crowned Pigeon, but as I have said, more resembling that of a Crowned Crane. The whole form of the body is very round.

I have only heard my bird utter a soft note sounding like 'whit.' He eats seeds, but is very fond of banana and insectivorous food.

It is to be hoped that another mate may be found for him, though whether such shy birds would nest in captivity, is rather doubtful.

I am uncertain if I am correct in giving this bird a nail on the short hind toes: they seem to be rudimentary.



## SUCCESSFUL BIRD-KEEPING IN CAGES.

By E. WARREN VERNON.

Seeing the letter from Mr. C. Barnby Smith *re* general management of birds in confined spaces, I am encouraged to offer a few hints on that subject, having had great success with all these birds I now write of.

Although I do not like cages as a permanent habitation for birds, still it is often an utter impossibility for one to keep them either in aviaries or to give up a whole bird-room to them. These suggestions may prove of use to those who, like myself, often have to confine their pets in cages.

For single birds to commence with, such as the Shâma, Hangnest, Inca Jay, and such like, I use a cage of the following dimensions:—Length, 30 inches; height, 16 inches; width, 11 inches; door, 5 inches; wires half inch apart front and top; wood, sides and back. I find air is fresher and the birds keep in better health if top is open. Three perches only are given, made to suit size of bird's foot; food tins or glass arranged so that the food keeps clean, well away from perches. If fruit is eaten I use an S-shaped wire, like this, to hang on to side of cage and hold fruit up. The bird does not then get it messed through its being on the ground.

A large bath, narrow and long, is given; as nearly all birds (but specially fruit eaters) require this every day.

Cages should be enamelled inside, tray and all, as then the wet sand will not rot the wood, and the often offensive smell will be avoided. I keep always an extra cage, into which the birds are turned in rotation, so that their cages may be frequently washed out with Jeyes' or other disinfectant fluid. The fronts are all movable and every corner is easily got at.

For keeping several birds together I have two large cages. Dimensions as follows:—the largest, in which are nine birds, is length, 48 inches; height, 36 inches; breadth, 30 inches. A division at 32 inches can be put up at will when cleaning or catching one of the occupants. In this cage are swing perches which I find all birds love. There is a food board six inches wide on both ends, with glasses sunk in it for food and water. A big



bath is hung on the 7-inch door, and some fresh turf, put just inside this door, prevents the water from splashing the board. This cage is all wire. At night, if cold, a cloth is put over the top. The following birds have been in it for six months and are in the best of health:—Bronze-headed Tronpial, Virginian Cardinal, Grey Bulbul, Red-cheeked Bulbul, Blue Tanager, Black Tanager hen, a pair of Crown Tanagers and a hen Marsh bird. In the following description of cage there are: pair Superb Tricolour Tanagers, pair Pekin Nightingales, and a Stonechat. Length, 36 inches; height, 36 inches; breadth, 24 inches; all wire; swing perches; four food glasses.

All the Fruit-eaters are fed the same, as much variety as possible being given, and it is astonishing what funny things they like. First, a very excellent soft food without egg—which I find they eat heartily—sometimes mixed with sponge cake, at others potato or grated carrot. Soaked sultanas and currants they love, also boiled rice; bread and butter they devour greedily, in huge mouthfuls. Lettuce they like and eat it all; of course the usual fruit, orange, banana, and grapes; flies, gentles, mealworms, even a garden worm is not despised. I notice that all my Tanagers are partial to seed, eating oats and canary, which is put for the Marsh Bird and Cardinal. I think keeping the cage always spotlessly clean, with frequent scrubbing and Jeyes' disinfectant, a good supply of gravel and plenty of air, (as the cages are put out of doors in a sheltered place whenever fine), accounts for the birds doing so well.

Those birds which live alone, are, as a rule, let out for a fly every day. They require exercise, and are quite well behaved, returning to their cages for a mealworm at once.

Now as to the Waxbills: these have been kept in an aviary cage and have done very well indeed. It is an ordinary Crystal Palace three-dome cage, the middle dome being filled with rush nests, in which four or five sleep together. They are a mixed lot: I have Cordon Bleus, Orange Breasts, St. Helena, Cape and African Waxbills, with one Lined Finch, one Fire Red, and one Violet-backed *Spermophila*; also a lovely pair of Pintailed Nonpareils. At present the latter, although so crowded, are busy trying to nest.

These birds are fed on canary, red- white- Indian- and spray-millet, rice in the ear, soft food, lots of grit, sand, and cuttle fish, plenty of lettuce and grass seed and the sweepings of the hay-loft. Last year I reared, out of doors, two Green Avadavats, three Orange-breasts and three Cordon Bleus. I hope to turn them out later on, but they certainly do well enough in a cage.

One thing I feel sure about, and that is, although all these foreign birds may do all right and survive the cold out of doors in England, they do not like it; and if I turned my South American birds out, I would have a part heated in the aviary, into which they could go at pleasure. I think it must feel rather as it would to us, if we were put down suddenly in our every day clothes, say in Lapland, and were expected to keep warm and comfy with no extra heat. After all, one should consider the natural climate of these birds—moist heat; surely no frosts, or if so, they are able to fly farther south and avoid them. Here what can they do to get away from the cold unless some place is made for them. I have had mine in a large Conservatory, kept just above freezing, and all this winter they have sung and seemingly enjoyed life. I do not for one moment say they do not live in the cold, as so many have kept them, I only say I am sure they cannot prefer it.

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## THE BLACK-CHEEKED LOVEBIRD.

*Agapornis nigrigenis.*

It may be of interest to some of our readers to know that a small consignment of this little-known Lovebird reached the London market this April. So far as I understand the matter, there are, or were until quite recently, only two skins in existence, both of which are in South Africa. The bird was discovered as recently as September, 1904, and is known only from two of the northern tributaries of the Zambesi. The official description of the species has been kindly supplied to me, and is as follows:—

*Agapornis nigrigenis*, W. L. Sclater.

B. O. C. XVI., p. 61 (1906).

General colour green, tinged with olive on the hinder half of the

head and neck, brighter on the [upper] tail-coverts; front half of the crown and forehead sienna-brown; sides of the face, including the ear-coverts and throat, black; quills dusky, washed with bluish green on the outer webs; tail dark green, all but the middle pair of feathers with a red stripe along the shaft and a subterminal dusky spot; under surface green, slightly lighter than the back and with a patch of salmon-red on the lower throat. Bill rosy-red, paler, almost white at the base; legs brown (in skin). Length (in skin) 6.25 inches, wings 3.6, tail 1.6, culmen .62, tarsus .50.

The female has the front of the head dusky rather than sienna-brown, and this colour does not extend as far back as in the case of the original specimen.

*Hab.* Muguazi River, North-west Rhodesia.

The arrival in this country of not less than five living examples of *Nigrigenis*, some of them adults, alters the aspect of affairs: we can now see (1) That both of the specimens described above were immature; (2) That, as was to be expected, the sexes are probably alike or very nearly so.

As regards the sexes, it is not impossible that all five of the new arrivals should be males; I certainly thought that I detected one female, but I may have been mistaken. But, even so, it is exceedingly unlikely that any sexual difference in this class of *Agapornis* would be indicated in the manner suggested above.

Even now, I feel that we must proceed warily, in some respects tentatively. A further examination of my two adults—I am more than ever satisfied that they are a pair—whilst revealing points of difference between the two birds, tells me also that the male is older than the female, and that both are changing tail feathers or replacing lost ones. Which of the differences are to be attributed to age, and which, if any, to sex? I have also an immature male shewing a third stage in the plumage. How are we to fit in these three stages with the two described by Mr. W. L. Sclater? what is the sequence?

I can only suggest as follows:—(1) The young bird, represented by Mr. Sclater's "female"; (2) An older but immature bird, represented by the original specimen, which the discoverer

did not sex, or could not because too immature; (3) My immature male; (4) My female; (5) My adult male.

Here I may mention that, in all the living specimens I saw, the under parts were lighter and of a yellowish green; a conspicuous white orbital ring, round in front but pointed behind, perhaps less so and rounder in the female than in the male; feet and claws whitish; and cere white, narrow in the immature bird with the nostrils hidden, deeper in the adult with the nostrils left fully exposed by the receding feathers of the forehead.

*Adult male*:—Generally as per type, but in a good light with the green above flecked with blue, while below it is yellow-green, with washes of yellow on flanks, and with the ventral region yellowish; the “olive” of the type is more than a tinge, and extends at least half way down the sides of the neck, where it meets and partly envelops the ends of the patch of salmon-red; the latter is more conspicuous than is suggested by the description, and is inclined to salmon-pink; the sienna-brown occupies rather more of the crown than the front half, and meets the deep blackish-brown (perhaps quite black below) of ear-coverts and upper face opposite to the hind and front corners of the eye—in my other specimens, the colours intermingle at these points, especially in the front. Quills—above, inner webs black or nearly so, outer green; below, with a good deal of blue wash on the secondaries. Edge of wing green, with a nearly parallel stripe of blackish on the under coverts; larger under wing-coverts clear light blue-gray. Upper aspect of tail as usually carried, green at base, then a broad wash or shade of dark green, tips lighter; the tip of every feather fades into a light blue-green wash, almost white at the point; central pair of feathers green with sub-terminal wash of darker; four lateral feathers with a broad patch of red (? light or yellow vermilion) near base, each patch being encompassed by a narrow band of light green; then some blue wash, succeeded by the usual patch of black; then blue again, and more of it, but too ill-defined to be called a patch; then the light tip. The outer pair shew red and black, *perhaps* as in female, but I have the note “outer web blue.” The general view of the outspread tail of this bird, below as well as above, reveals considerably more blue and bluish than I have mentioned—it

seems rather indefinable. Iris dark yellow-brown; cere broad, with the nostrils fully exposed. Head broad "between the eyes."

*Female* (a younger bird, as evidenced by the narrower cere, one nostril being hidden, the other partly exposed):—Generally like the male but smaller, less bulky, more timid and gentle, and with narrower head; iris pale yellow-brown (much lighter than in adult male); quills, below, strongly washed with blue along inner edges, except (I think) the first primary which is brown; under wing-coverts green, with the larger ones dirty smudgy whitish; edge of wing partly yellow. The tail as in the male but with much less appearance of blue, and this below inclined to pale slate-gray; on the outside feather, the red encroaches on to the outer web but the black does not; a "dark green stripe on outer web," i.e., running up the centre of the web parallel with the shaft, and not including the whole breadth of the web; tips of tail feathers as in the male but more inclined to yellow-green, and, I think, not extending to the outer web of the outer pair.

*Immature male*:—Generally like the adult male, but smaller. Upper aspect of whole tail with more of the dark green shade, and tail tips light yellow green fading into whitish; middle pair in other respects dark green; the next four pairs with the broad patch of red running up the centre and succeeded by the usual subterminal black band of *Agapornis*—no mere dusky spot as in the original specimen; on the outer pair, the red and black are confined to the inner web, the outer being dark green tipped with lighter. The blue, which was conspicuous in the adult male and well represented in the female, was not noticed in this example. Quills, inner webs dusky, outer green—the blue wash below was not noticed; an ill-defined streak of bluish or blackish, about parallel with the wing-edge, on the green under wing-coverts. Cere narrow, with nostrils entirely concealed. By an unfortunate oversight, the iris was not inspected.

The foregoing descriptions are inadequate in some respects, and some points need further examination; but it is difficult and a very serious matter to make a detailed examination of a living

and very nervous subject. As it is, I have broken a tail feather, a sacrifice which I would not willingly have made to please anybody, so I handle my birds no more yet awhile. I trust that some other pen will describe the remaining two—or more, if there are more—living examples now in this country.

The calls and cries are not identical with but are like to those of the Rosy-faced species (*A. roseicollis*), the accompanying automaton-like flick of the tail being equally conspicuous when the bird is excited.

It is a lively bright little fellow, and, although very nervous after its terribly long journey, shews a disposition to be friendly and even familiar.

I fear that it is a little bit inclined to be “wicked”; let us hope that it is not quite so bad as *A. cana*.

REGINALD PHILLIPPS.

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## THE MIND OF A BIRD.

By Dr. A. G. BUTLER.

Darwin has very justly remarked (*Descent of Man*, 2nd ed. p. 114) “It is a significant fact, that the more the habits of any particular animal are studied by a naturalist, the more he attributes to reason and the less to unlearned instincts.” I take it that the chief difference between reason and instinct is that the first quickly solves a difficulty and the second represents a solution arrived at through the experience of numerous generations, and inherited. An instance of the former was related to me many years ago by the artist—Mr. George Ford: When with Sir Andrew Smith in South Africa an experiment was tried with a dog and a monkey, both chained up by a collar round the neck, in a yard; a bone was placed out of reach of the dog, and a plantain (if I remember rightly) out of reach of the monkey; the former simply struggled against its collar and barked, when it could not reach its bone; but the monkey having run the length of its chain, and finding the desired dainty still beyond its reach, immediately turned round, adding the length of its body to the chain, and grasped the food with its hind foot. On the other hand instinct is represented by the manner in which birds of

different families normally build their nests; inherited habit which obtains, as I have shewn, even after a lapse of hundreds of years of domestication, during which time the natural instinct has been in abeyance.

When a bird alters its method of building, there is always a reason for the change. It is obvious that, in a crowded aviary, where many birds may desire to nest simultaneously, it is an advantage for many birds to build in boxes or prepared Hartz travelling-cages, rather than in open bushes; in the former there is only a front entrance to defend; in the latter the owner of the nest may be molested from all sides. This is why, in my opinion, many of the small finches prefer to build in such receptacles, when associated with many other birds.

Even in their wild state various species of birds surround their nests, with the exception of a narrow entry, with thorny twigs; which offer a formidable protection against the inroads of marauding enemies. Others, as recorded in various works by travellers in different parts of the tropics, build their nests close to the homes of particularly venomous wasps. In these cases, however, we have inherited reason, which has therefore been called instinct.

That birds differ considerably in their reasoning powers is an unquestionable fact, the English House Sparrow being one of the most weak-minded; whereas some of the Crows, the Hang-nests (*Icterus*) and the Parrots, are among the most keen-witted.

In 1877 I wrote to Charles Darwin respecting a pair of House-Sparrows which persisted in building their nest in a roller-blind. Every morning the blind was lowered to shade the room from the sun and the nest fell to the ground; but no sooner was the blind drawn up again than all the rubbish was replaced. This continued for nearly a month, and it was only after two or three wet days, which had enabled the birds to make considerable progress, when the lowering of the blind again threw out the materials, that they were convinced of the futility of their efforts. Darwin's reply to my letter is published in "British Birds with their Nests and Eggs," vol. II., p. 87. On another occasion I watched a female *Passer domesticus* attempting, for two hours, to persuade a quill-feather, of probably a goose, to remain by itself

(as a foundation for its nest) across the branch of a tree; of course the moment the bird let go of the feather to seek fresh materials, over it fell to the ground and was immediately retrieved and replaced, only again to fall.

On the other hand a Hangnest confined in a cage immediately begins to examine the fastenings of the door; if this is kept closed by a simple hook and eye, it will probe about with its long bill and try its utmost to lift the hook; and no sooner is this done, than the bird pushes the door open and escapes; I well know, to my cost, how extremely difficult so intelligent a bird is to capture with a net; it seems thoroughly to enjoy one's discomfiture as it conceals itself behind some heavy cage, and then, while one is shifting the latter, slips out at the opposite side and is hidden on the top of some shelf yards away, before one can turn round.

My English Jay always expects me to play with him when I give him his food in the morning; I have to put my finger through the wire of his cage and he makes a dig at it with his bill, aiming at the wire close to my finger, as though he were aware that by striking at my digit he might cause pain. Of course I have to pretend to be alarmed and draw away my finger hurriedly; then he turns partly round and pretends not to be looking, but as my finger remains he suddenly whirls round upon it; often he even takes a short hop towards his food and then spins round at me: feinting is evidently a fighting-trick quite understood by this bird.

It would not be supposed that a predaceous bird like a Jay would show any sympathy for the troubles of other species, much less that it would exhibit magnanimity towards small birds, yet this seems to be the case with my hand-reared bird:—The Mocking-bird which I now have was the old and valued companion of a lady, who, being about to travel, offered the bird to me; since its arrival it has been in my possession about eight years. From old age this bird's feet are much distorted, the toes crumpled or wanting to some extent on each foot, in consequence of which they sometimes become clogged and "balled" with dirt. When this happens, of course I have to catch the bird out of his flight-cage, and my Jay not understanding that my object in



catching the Mocking-bird is a benevolent one, always becomes terribly angry and scolds me in his harsh natural cry until the patient has been restored to its cage. He becomes equally angry if my exceedingly wild hybrid Blackbird rattles about when I am changing its food.

With regard to the magnanimity of this bird I am a little more doubtful; but it is a significant fact that although extremely fond of dining upon small birds which have died through egg-binding or have been killed by others; when, on more than one occasion, House Sparrows have found their way into my conservatory and have flown into his cage, he has not made the least attempt to molest them, but has remained on a top perch until they have found their way out again: nevertheless I think it possible that if a living sparrow were held in the hand and offered to him he would be unable to resist seizing it as he would a dead one.

All birds with any intelligence are extremely jealous of attentions paid to their neighbours; and if one pretends to ignore them will do their utmost, by song, speech, or cries, to direct attention to themselves; my Jay will even pick up stones and throw them from one of his perches through the wire, or he will drop to the floor of the cage, come to the front and repeatedly call "Jimmy!" until he is taken notice of.

Fear of cats is instinctive in many birds, and the association of certain sounds with the presence of a cat is sometimes so: thus, although my Jay was hand-reared from the nest and had never seen a cat until he came into my possession; yet the first time he caught sight of one on the aviary outside my conservatory, he uttered his harsh alarm-cry, raised his crest and flew backwards and forwards between his perches in the greatest terror. After a short time he learned to imitate the *miau* of a cat in pain, to perfection; and now, if after uttering his alarm-note, he still sees the beast on the aviary he growls like cats fighting.

The late Mr. Abrahams once possessed a Spotted Bowerbird, eventually purchased by the Zoological Society, which when asked "Where's the cat?" or if one called "Puss, Puss!" immediately began to mew; this bird therefore also associated the idea of the beast with its cry.

Darwin says :—" It is certain that some Parrots, which have been taught to speak, connect unerringly words with things, and persons with events." I know that an Amazon Parrot which we had some years ago, whenever it saw my wife in her bonnet, would ask—" Are you going out?" " Yes " my wife would reply. " Are you going in the park?" " Very likely " would be the answer. " There's a cat in the park " was always the last remark of the bird.

My Grey Parrot used to know us all by name, and call to us when it caught sight of any of us, never confusing one with the other : but, talking of the connection of sounds and things, my Jay always imitates the sound of seed being poured into a tin, when he sees me with a tin of seed or insectivorous food in my hands.

Undoubtedly association with mankind has a marvellous effect in brightening up the intellect of birds, and this is especially noticeable with hand-reared birds which are not allowed to mix with others : thus a hand-reared Pied Wagtail used to delight in children's games such as " Hide and Seek " and " Touch," and played the games with as much intelligence as a child.

Two hand-reared Canaries which we had at different times would play the first game (which, after all, even wild birds play at among themselves) but they never had the sense to play at " Touch." The same Wagtail had such an abnormal variety of notes that he could express his feelings almost as clearly as if he had used articulate language. A House-Martin which I hand-reared used to tumble out of bed in a cocoanut-shell, and fly from his cage to nestle down in my hand, every evening when I returned from town and called to him ; and my Blue-bearded Jay flies to the end of his cage and hangs on the wire with his crest up directly I call " Jack ! " though he is not hand-reared, but has only learned to trust me by degrees.

The strange thing is,—that hand-reared birds although so tame that they will fly from one person to another when called, if they are turned loose among other birds, frequently become far more wild than if they had been trapped when adult : the presence of the person upon whose hand, head, or shoulder they

previously sat contentedly and without the least nervousness, now drives them perfectly frantic with terror; so that one is almost persuaded that the other birds in the aviary must have been maligning one to them. Yet some species (such as the Blue-Tit and the Siskin), remain as tame as before and fly to their owner directly he enters the aviary. Birds bred in aviaries are sometimes far more terrified of their owners than those caught wild, but not invariably.

I cannot do better than sum up in the words of the great teacher with whose remarks I began this article. Speaking of man and the higher animals he says:—"All have the same senses, intuitions and sensations,—similar passions, affections, and emotions, even the more complex ones, such as jealousy, suspicion, emulation, gratitude, and magnanimity; they practice deceit and are revengeful; they are sometimes susceptible to ridicule, and even have a sense of humour; they feel wonder and curiosity; they possess the same faculties of imitation, attention, deliberation, choice, memory, imagination, the association of ideas, and reason, though in very different degrees."

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## NOTICES OF NEW BOOKS, ETC.

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THE BRITISH WARBLERS, by H. ELIOT HOWARD, F.Z.S., M.B.O.U.  
R. H. PORTER, 7, Princes Street, Cavendish Square.

The second part of this profusely and beautifully illustrated Work commences with a coloured plate of three immature Sedge-Warblers; this is followed by a full account of the Chiff-Chaff, with a coloured plate of the adult male which we think might be improved by brighter colouring; a second coloured plate represents an adult female and two immature birds; five photogravures represent the two sexes in various attitudes: of these the second represents the male in flight during a condition of excitement, the third and fourth males exhibiting attitudes during courtship and the fifth, a female at the same period. A plate of the female (to come between the first and second is promised in the third part). Then follows a plate of the Yellow-browed Warbler with a description of the plumage and the Geographical distribution outside the British Islands, and a record of some of its occur-

rences within them. The part concludes with a coloured plate of immature Grasshopper Warblers. There is no doubt that this is a beautiful and useful book; but there is a tendency throughout to under- rather than over-colour the plates, so that there is a sameness about them which one does not find in the living birds; for this reason we much prefer the photogravures.

ED. *pro. tem.*

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### BRITISH BIRDS.

The April number includes an interesting article on the Breeding Habits of the Common Bittern, by E. W. Wade. Messrs. H. F. Witherby and N. F. Ticehurst write respecting the spread of the Little Owl from the chief centres of its introduction into the British Islands; they also continue their account of the more important additions to our knowledge of British Birds since 1899, and Mr. W. P. Pycraft has an admirable article (with illustration of the breast, with some feathers removed to show the patch of "powder-down" feathers) entitled "The 'Powder-down' of the Heron." Among the notes is an interesting one, with illustration, of a Swallow's nest built on a glass gas-shade; and a second of a Martin's nest built on a window-pane; these nests being presumably attached to the glass by means of sticky saliva secreted by glands as in the Edible Swift. The White-winged Lark is recorded as having been shot on the first day of the present year at Pevensey Sluice, Sussex, and is illustrated by a photogravure of the stuffed bird. Other more or less interesting notes conclude the part.

ED. *pro. tem.*

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### THE SOCIETY'S MEDAL.

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Medals have been awarded to Mr. T. H. Newman for breeding the Madagascar Turtle-Dove (*Turtur picturatus*) and to Mr. W. E. Teschemaker for breeding the Chingolo Song-Sparrow (*Zonotrichia pileata*) and the Hedge-Accentor (*Accentor modularis*) for the first time in this country.

## CORRESPONDENCE, NOTES, ETC.

SIR,—A friend of mine in Nepal has sent me over recently amongst other birds, four hill-partridges (*Arboricola torqueola*). These are charming little birds—three of them orange-throated and the fourth, a larger bird, white-throated.

I should like to know if the last named is a different variety, or is the difference merely one of sex or age?

All the birds seem very fond of perching, and at present I have them in a run, with a pair of Crimson Tragopan pheasants, where there are several fir-trees, also some grass, a little brushwood, etc. I feed on small seeds—chiefly dari, and give maggots occasionally. Can this be improved upon? I should also be glad to know if these birds are hardy in winter, with the shelter of a wooden shed; also, if they are likely to breed, and whether the young require any special treatment.

It may interest some of your readers to hear that my Partridge-Tinamons (*Nothoprocta perdicaria*), about which a note appeared in the *Avicultural Magazine* for last June, have proved able to stand the winter well: indeed they seem quite regardless of cold. No artificial heat has been given, and though I have done my best to induce them to take shelter, they often insist on being outside in awful weather. They have flourished and grown fat on small seeds and grass; and, to my surprise, very little insect-food seems necessary for their well-being. At present I have not seen any signs of breeding.

C. BARNBY-SMITH.

## INHERITANCE FROM PREVIOUS MARRIAGE.

After producing hybrid Ouzels for two years in succession—1905 and 1906, I turned the hen Blackbird loose in the garden. It would seem that she must have paired with an English Blackbird in 1907 and reared young which have inherited characteristics of her previous mate—the Grey-winged Ouzel. This year a Blackbird is to be daily seen in the garden accompanied by a hen; he is practically indistinguishable from the male hybrids which I produced in 1906, having the same red-brown patch on the wings: the odd thing, however, is that he sings like my Grey-winged Ouzel.

A. G. BUTLER.

DURATION OF INCUBATION OF *TURTUR PICTURATUS*.

SIR,—In my notes on the Madagascar Turtle-dove, published in the *Avicultural Magazine* for last January, I stated that I did not know for how long the birds sat; as this is one of the points where the aviculturist has so much advantage over the observer of wild birds, I think it may be worth while to supply this omission.

My pair became anxious to start nesting early in the year. I found the first egg on January 23rd, which had evidently been laid the previous day, as there was another on the next day, these eggs however were broken.

Three days' later (February 12th) another was laid, the second following on the 14th. Both eggs were hatched on the morning of the 26th. I saw the young about 9.30 a.m., they looked some hours old and had been fed by their parents. This makes the duration of incubation twelve days; but I thought I would wait and see the result of the next nest.

The birds laid again on the 17th and 19th of March; I was away when these eggs hatched, but I had left word that the nest was to be closely watched, and on the 31st (again the 12th day after the laying of the second egg) both eggs were found to be hatched, one egg shell was picked up in the flight quite dry, shewing the young had been out some time, as early as 7.30 a.m., so that hatching may actually have taken place the previous day.

I think it is not a little remarkable that such large birds should sit for so short a time; the only other Turtle-dove, as I have already pointed out, that I have known to hatch in twelve days is the Half-collared Turtle (*Turtur semitorquatus*), so that size seems to have little to do with it, in fact the larger species seem to take less time.

The birds have to-day (15th April) just started sitting for the fourth time this year.

T. H. NEWMAN.

SIR,—My Ravens are now bringing up five fine young birds in their nest in one of my aviaries; and I shall be happy to give a young one to any member of our Society who can give it a good home in the country.

SCAMPSTON HALL, YORK.

W. H. ST. QUINTIN.

## POST MORTEM EXAMINATIONS.

Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lauherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, and a fee of 1/- for each bird. If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons and Canaries can only be reported on by post.

PEKIN ROBIN. (Mr. Isaac). The bird died of apoplexy.

LOVEBIRD. (Miss Douglas). The bird has suffered with disease of the liver for a long time. There is no treatment I can suggest for the other birds without seeing them when ill.

BUDGERIGAR. (Major A. B. Trestrail). Your bird died of apoplexy. He was very fat indeed.

*Answered by Post:*

Mrs. Johnstone.

Hon. Mrs. Hodgson.

Mrs. Palmer.

Rev. H. D. Astley.

In reply to many members Mr. Gill begs to say he cannot give the time to prepare the skins of birds for the taxidermist under any conditions, and examinations will only be made on birds sent intact.

### III.

NOTICES TO MEMBERS—(*Continued from page ii. of cover*).

#### NEW MEMBERS.

Mr. EDWARD W. GIFFORD, Assistant-Curator of Ornithology, California;  
Academy of Sciences, San Francisco.

Mr. ALFRED BARLOW; Superintendent, Alexandra Park, Oldham.

Mr. H. ROBBINS; 25, Campden Hill Square, W.

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#### CANDIDATES FOR ELECTION.

Mr. TREVOR OLIPHANT; Teston Rectory, Maidstone.

*Proposed by* Dr. BUTLER.

Col. PORTESCUE; Falmouth House, Newmarket.

*Proposed by* Sir WM. INGRAM, Bart.

Mr. P. S. HOYTE; Dunlewy, Seymour Road, Plymouth.

*Proposed by* Messrs. PAYNE & WALLACE.

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#### CHANGE OF ADDRESS.

Mrs. VIVIAN; *to* Fircroft, Penn Hill Avenue, Parkstone, Dorset.

Colonel R. DRUMMOND HAY; *to* Pinewood Cottage, Frimley Green, near  
Farnborough, Hants.

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#### MEMBERS' SALE AND EXCHANGE COLUMN.

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## THE JOURNAL OF THE AVICULTURAL SOCIETY.

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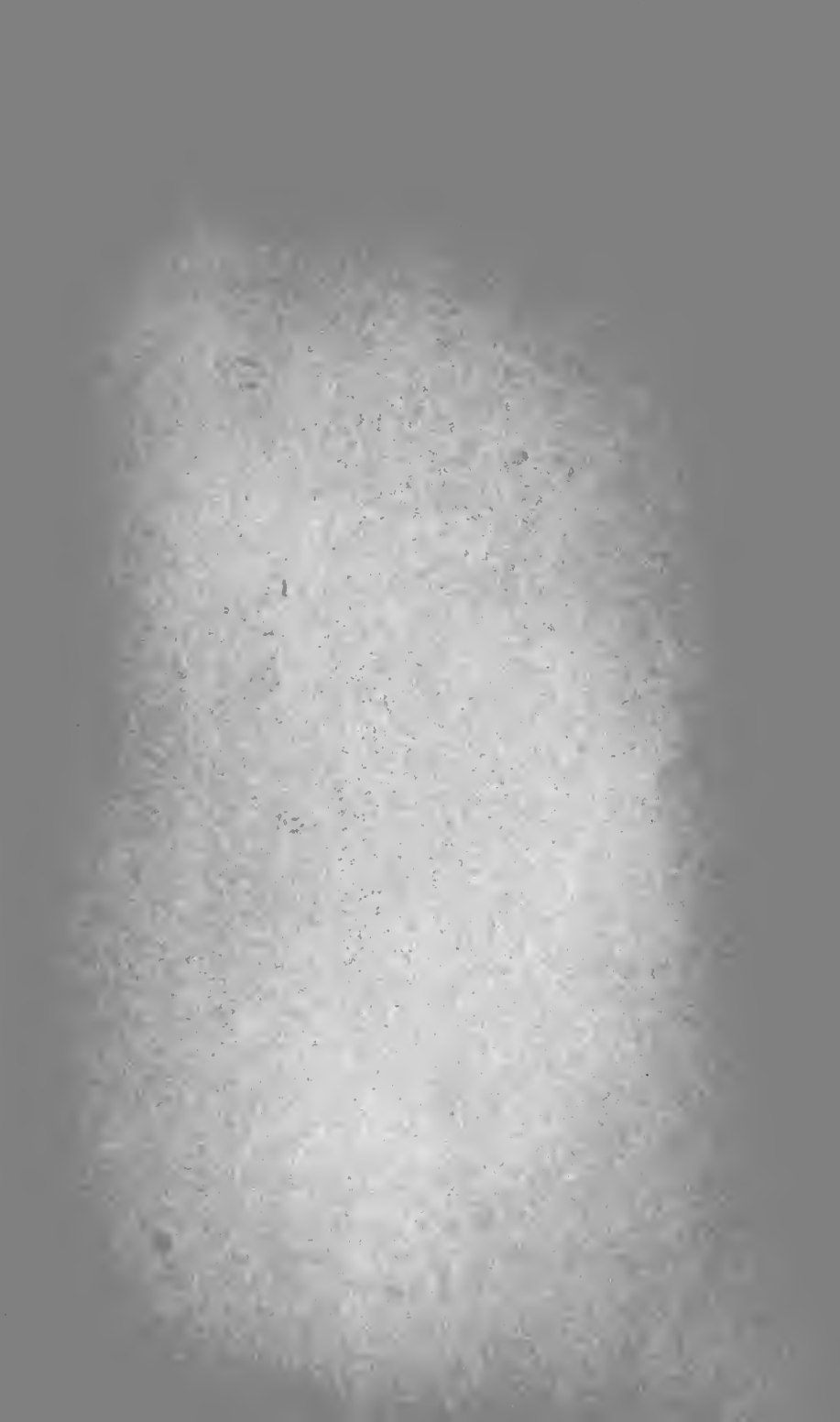
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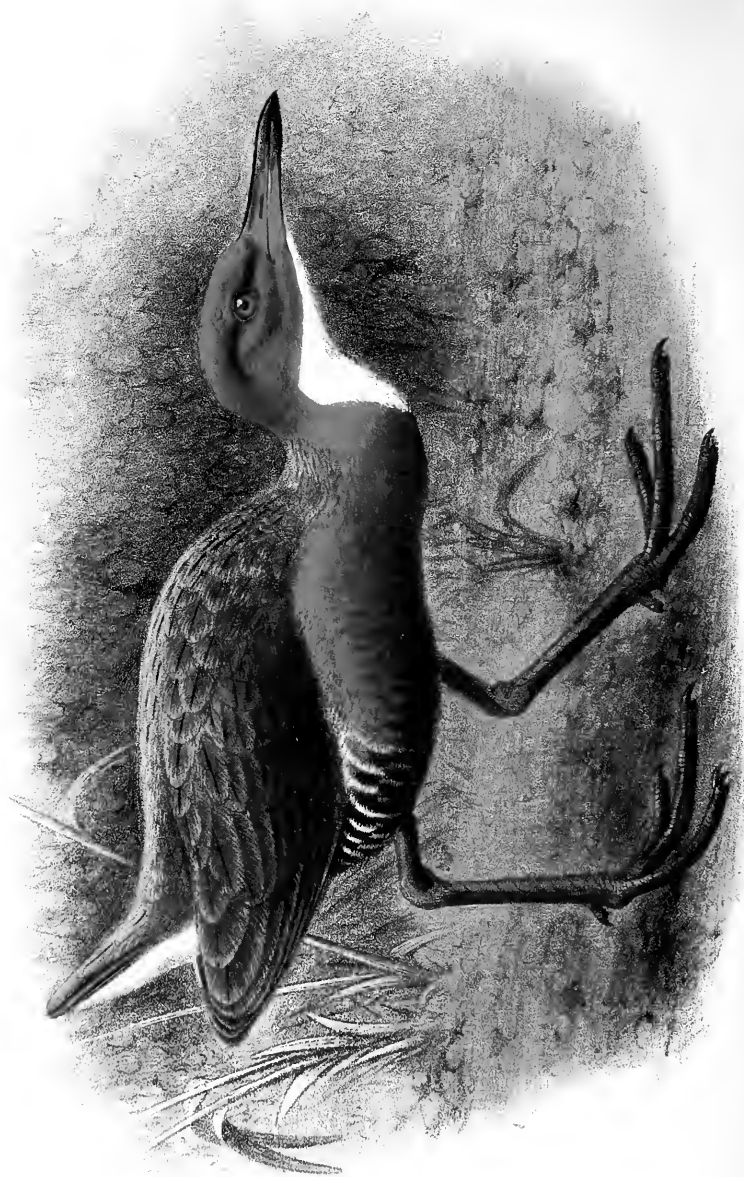
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(Continued on page iii. of cover.)





H Goodchild, del. et lith.

ABBOTT'S RAIL.  
*Rallus abbotti*.

Bale & Danielsson, L<sup>ds</sup> imp.

# Avicultural Magazine,

BEING THE JOURNAL OF THE  
AVICULTURAL SOCIETY.

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JUNE, 1908.

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## ABBOTT'S RAIL.

*Rallus abbotti.*

By E. G. B. MEADE-WALDO.

The subject of this picture was taken on March 12th, 1906, on Assumption Island, South Indian Ocean. We landed on this island, which is situated about 300 miles N.W. of Madagascar, about 10 a.m., and after passing over the beach of white coral sand on which many huge edible turtles were wandering about, we entered the edge of the scrub and were immediately greeted by squeals and grunts—a voice strongly resembling that of our own Water Rails,—and presently several of these White-throated Rails appeared round us, craning their necks and coming quite close. I picked up one in a butterfly net, which is the individual figured.

During the two days spent on this island we saw numbers of these rails, which are evidently very common. They were not easy to catch, not owing to being wild, but owing to the extremely thick scrub which they frequented and in which they climbed about freely. We also saw broods of black young ones. Assumption Island is uninhabited; it is some four miles long, about two miles in width, and the shape of a bean with the hollow to the South. It has a fringe of very thick scrub all along the leeward side, and the rest of the island is covered with grass, bushes, and some scattered trees, mostly *Hibiscus*. The island is of ancient coral formation and, with the exception of some sand-hills about 60 feet high, only slightly raised above high water mark.

The two rails we caught were easily kept: they would

eat almost anything at once, but did not become, nor are they yet (two years afterwards) any more familiar than they were on their native island. They have well developed wings, but do not appear to fly, although they can do so, as I have seen the individuals in the Western Aviary, Zoological Gardens, perched on the highest perches. This rail is peculiar to the Island of Assumption, and although closely resembling it, is quite distinct from the rail of Aldabra Island, only some 40 miles away. There appeared to be no springs of fresh water on Assumption, with the exception of numerous puddles of rain water, but as there are several land birds, viz., a dove, a ground cuckoo, and a Sunbird, all peculiar to the Island, the supply must be a constant one. The numbers of this rail are probably kept in check by rats, of which we saw a few, and also the cocoa-nut crab (*Birgas latro*) of which there appear to be a fair number. The two rails that we brought back to England on the "Valhalla" would certainly have bred had they not both been of the same sex.

\* \* \*

The following is the account given by Mr. M. J. Nicoll in his extremely interesting work "Three Voyages of a Naturalist" which, as it enters somewhat more fully into the notes of the bird than in Mr. Meado-Waldo's article, may I think be reproduced here with benefit to our readers; he says pp. 108, 109 and 111:—

"On first entering the belt of trees and low bushes which fringes the shore, we were greeted by a chorus of squeals and grunts, as though a litter of pigs were hidden in the cover. This remarkable noise proceeded from a number of rails,\* birds much like our water-rail but rather more stoutly built, and with wine-red breasts, barred on the flanks and belly with black and white. These rails were very tame, and walked about close to us in a perfectly unconcerned manner. We never saw one of them fly, or even try to do so: they trusted entirely to their legs when pursued. In several patches of bush we came across family parties of them, and although the young were mostly full-grown and feathered, we saw several which were still covered with black down. They were found on all parts of the island, except on

---

• *Rallus abbotti*.

the summit of the sandy hill on the windward side. While uttering its remarkable note, this rail stands quite still and puffs out all its feathers; from what I observed I should say that the skin of the throat is also expanded. The notes are loud—a strange mixture of squealing, grunting and booming—and during its song the bird appears to be gradually collapsing, until at the end it is once more of normal size. I have heard our English water-rail utter a somewhat similar noise when near its nest, but its cries are never so loud as those of the Assumption rail. We caught two of them alive and brought them safely to England, and they are at the time I write living in the London Zoological Gardens.”

\* \* \*

“Unfortunately, rats have been imported by some means into Assumption and are now very abundant. There is little doubt that they devour many eggs of the rail and of other birds which nest near the ground, and should the rats increase to any extent, there is a great danger of these interesting birds becoming extinct in the near future.”

ED. *pro. tem.*

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## NOTES ON BIRDS IN ICELAND.

---

It has often struck me as strange that, comparatively speaking, so few lovers of bird-life visit a country so wonderfully rich in bird-life.

I myself have been to Iceland a good deal, but must plead guilty to not having gained as much information as I ought to have done, partly owing to my lack of knowledge of ornithology and partly owing to the fact that when in Iceland my attention has been devoted almost exclusively to trout—and the rule holds good here as elsewhere that one only sees in a country what one goes to see.

However, I have noticed one or two interesting birds, and the tameness of some of them is surprising. On my last visit three years ago, I got a splendid opportunity of watching the Great Northern Diver. A friend and I landed for lunch on a little rocky islet, in the midst of a large lake; and this islet had evidently been a nesting place for the Great Northern Diver.

One of the old birds greatly resented our approach, and with loud shrieks and repeated divings, tried to lure us away.

When we left the islet and took to our boat the bird kept repeatedly diving and coming up fairly near the boat (but always further away from the islet) and gave us grand opportunities for observation, though we never managed to find any young birds.

The Red-necked Phalarope is to my mind one of the most interesting birds to be seen, and it is in certain districts quite common. I have often watched these birds with much interest when they were flitting about on the edge of lake or stream, or (as they are very fond of doing) riding on the water whilst picking up insects that fell from the overhanging banks. On one occasion my guide actually caught one in my landing net. This bird was possibly a young bird though it looked full grown. These Phalaropes will often rest on the water without showing the least alarm whilst a large trout fly is repeatedly thrown close to the spot. I have never seen a nest and should much like to find one.

The most noticeable bird to the casual observer is the Whimbrel. These birds swarm on the moors near the sea in the summer and their weird cry "tetty-tetty-tetty-tetty-tet" accompanies one everywhere. They are very wary however. If some enterprising member of the Avicultural Society would solve the problem as to how to keep these birds in health when in captivity, we should many of us, I feel sure, be grateful.

I am told that the Curlew does not breed in Iceland which seems strange as it is apparently a most suitable country.

I suppose most people going to Iceland for the first time expect to see Eider Duck everywhere. They will probably be disappointed as these birds move off their breeding haunts early in the season, and though the islands of "Engey" and "Videy" in Reykjavik Bay are full of Eider Duck in the Icelandic spring, there are comparatively few birds to be seen there later in the season.

Other Ducks in endless variety are common where there is water for them. The one that I have found most interesting is the Harlequin Duck. As soon as the ducks nest the drakes pack together for some considerable time and form a very striking



spectacle when flying up and down over the torrent-like rivers or settling on the banks. They seem to prefer fast running water. At the same time one may see the old ducks piloting fleets of young ones in a wonderful way on the edge of the rapids.

I cannot find from enquiry that the Harlequin Duck has ever been kept in captivity or semi-captivity in this country. The drakes are most exquisitely beautiful birds and if no serious attempt to keep them has been made it surely would be worth while for some expert to try. Probably the food would be the main difficulty though some birds have great capacity for changing their food. Can anyone speak as to the Harlequin Duck? Possibly the best way of attempting the matter would be to bring over fresh eggs to hatch here. If so, I may mention, as a personal note, that I am starting in the second week in June for the neighbourhood of Myvatn, in the North of Iceland, where Harlequin Ducks nest and I would gladly try to bring back some fresh eggs with me in July if any member of the Avicultural Society, who is an expert with wild fowl, would care to make the attempt to hatch and rear the birds in the interests of aviculture.

I have been told that I have twice seen the "great" or "solitary" Snipe in an Icelandic "forest," though I must say that I thought the bird was in each case a Woodcock. However there are said to be no Woodcock in Iceland. The Common Snipe is not so plentiful as one would expect even in suitable localities.

The Icelandic Grouse now exists in sadly diminished numbers. These birds, even in the South, in August often show a good deal of white in the plumage. Whether these grouse could be successfully kept in England is an interesting question. Perhaps some game expert will give his views.\*

Golden Plover breed in Iceland in immense numbers, but I have never seen the Grey Plover. It is curious to note that the Golden Plover always settle on the home-field of an Icelandic Farm in preference to open moorland. I suppose they find more food. In August they are absurdly tame. The Ringed Plover is

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\* The grouse of Iceland is the rufous form of the Ptarmigan known as the Rock-Ptarmigan (*Lagopus rupestris*)—E. G. B. M.-W.

another most interesting breeder in Iceland. The Raven is very common in the districts where I have been and is much harrassed by farmers owing to the birds attacking young lambs.

All the Richardson Skuas that I have noticed were of the dark form—indeed of such dark brown as to appear almost black. These birds are very common.

The above notes only mention a very few of the many interesting birds to be seen in Iceland. For the bird lover who knows his subject the island must be a splendid field for observation. Moreover there must be many birds which could be brought from there to be kept in captivity in England and which in our uncertain climate should be easier to keep in health than birds imported from semi-tropical countries.

C. BARNBY SMITH.

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## THE WALL CREEPER.

*Tichodroma muraria.*

By ALLEN SILVER.

A hurried search through the indices of our Magazine reveals only about one previous reference to this extremely interesting bird. On page 215, Vol. 1, N.S., No. 6, a list of birds exhibited for the first time at the Zoo is given, and from that we learn that two examples were to be seen there on Feb. 4th, 1902.

The only living specimen I have had the opportunity to observe in captivity was one, until quite recently, in the possession of my friend, Mr. C. T. Maxwell, of Brixton (who was at one time a member), and owing to his kindness I have been able to closely follow this bird's behaviour since he acquired it.

Those who are familiar with its relative, the Tree Creeper, as a cage bird, know quite well that, at its best, it is a fragile and somewhat difficult subject for aviculture; but, as far as one can judge from a comparatively short acquaintance, extending over some six or eight months, the Wall Creeper can hardly be described as sharing the same disadvantages, for in many of its characters it resembles the Nuthatch, and provided one could acquire an immature specimen and keep it under suitable conditions, I see no reason why such a bird should not thrive

satisfactorily for three or four years in captivity. My first introduction to the bird was soon after its arrival in this country last year: although it was by no means wild, it was exceedingly energetic, and the way in which it scrambled about over and under the cork bark fixed up in its cage was, to say the least, extraordinary. In spite of this, it always kept itself in excellent condition until the day of its death, and upon examining it, as I write these lines, I can hardly detect a frayed feather in the whole plumage. Its death was somewhat disappointing, as the bird was just assuming its black throat, but during its whole career it seemed never to have an hour's illness, and in fact the owner was inclined to look upon it as anything but a troublesome bird to keep. Its food consisted of the usual insectivorous mixture, which was supplemented by a little raw meat, mealworms and other live creatures, and it was kept (for convenience sake) in a cage not more than 30 inches long, 18 inches high and 12 inches deep.

As far as one could judge, I should imagine it was a well-matured bird when received, and as it only became indisposed just previous to death, it is just possible its end may not have been untimely. I, unfortunately, have no account of how long it had been kept in Germany, but the tarsi were heavily scaled in front; much more so than would have been the case in a young bird; and, as its keeper there had supplied a little raw meat, this had not been discontinued. Both Mr. Maxwell and myself are inclined to think that possibly, owing to the sudden increase in the temperature, a small piece hidden by the bird may have become putrid and, if afterwards swallowed, would go a long way towards hastening its end.

A rough description of the bird may be summarized as follows:—Total length about 6.5 inches; culmen 1.1; wing 4.0; tail 2.1; tarsus 0.95. Above pearl grey, slightly brownish on crown, the upper tail coverts being blackish; throat and upper breast silvery white (becoming black during the breeding season) breast downwards slaty grey verging into black on the abdomen and under tail coverts. Lesser wing coverts white, tipped with pale crimson; the greater coverts pale crimson; on the outer web slate, black on the inner; primary coverts and primaries exter-

nally crimson for the greater part on the outer webs and dark slaty black on the inner; most of the quills black, spotted with two white bars except the first; on four of the secondary quills not exposed to view golden brown markings are to be found. The primaries and secondaries are tipped also with slaty white, and the rectrices similarly marked, the outer ones far down the web. Bill and tarsi black; iris very dark brown.

It may be of interest to state certain little peculiarities in the behaviour of the bird viewed from a range of two feet. After it had been out to a number of Shows, it would make itself quite at home at such a short distance feeding fearlessly. A mealworm was usually beaten on the floor of its cage up against the bark, to which the bird might be clinging, before it was swallowed, and small cockroaches were beaten and pinched, until their legs came off, on the floor of the cage (much in the same manner as a thrush would treat certain forms of live food) and afterwards "bolted." Blue-bottle flies and spiders were pinched between its mandibles and then swallowed whole. After such operations the bird usually wiped its long bill upon its perch. Instead of climbing after the fashion of Creepers or Woodpeckers the bird really scrambled and ran with lightning rapidity over or up the bark in its cage not resting its body and tail close against this, and would frequently expand and close its tail and wings when so engaged. As before mentioned, many of its movements reminded one distinctly of *Sitta cæsia* rather than *Certhia familiaris* and like the former bird it perched freely,\* sitting fairly upright. When feeding, the Tree Creeper will hang in any convenient position and collect food from its food vessel, or drop down awkwardly on to the edge of it, but the Wall Creeper just hops down on to its perch in quite a natural manner, and pecks out the food in a different way. When moving over the cage bottom it would stand fairly upright and run or scramble, sometimes quickly and at others slowly, with the wings well tucked up, not drooped as if to preserve its balance. Food was sometimes carried up to the bark and pushed in a crevice and then eaten, or left on the ledge and forgotten, and the bird would run behind a piece of cork and peep out underneath in quite a

---

\* The tarsi are distinctly those of a Nuthatch as also are the toes and claws.

knowing way. I do not however remember hearing it utter a single note of any kind, although its cry is said to resemble that of *Dendrocopus minor*.

The Wall Creeper is the only representative of its genus, which is placed in an intermediate position between *Certhia* and *Sitta*; but resembles the latter in its slaty and dense plumage, and soft tail not used in climbing, and also shares the character of white markings on the tail feathers. Its bill however is not powerful, hard, and sharp like that of many of the true Nuthatches, but favours the form peculiar to the Tree Creepers, not however being anything like so sharp at the end or so curved, but more round and much longer. In this country it seems quite an accidental visitor, and as early as 1792 it was notified by Robert Marsham to Gilbert White. It was also recorded from Lancashire by Mr. F. S. Mitchell in 1872, and again by Mr. Ruskin Butterfield, and for further additions I would refer the reader to p. 110, Vol. I. British Birds (Witherby & Co.) This birds' range extends from the mountainous regions of Southern Europe into Central Asia, and as far east as China, it occurs in most of the mountain ranges eastwards from the Caucasus, and is also an inhabitant of Abyssinia\* to the southward. Its northward range in Europe (especially France and Germany) is greater than usually recognized, and this apparently was notified by Mr. Howard Saunders in the Bull. Brit. Orn. Club, I. p. xlix. A German writer Dr. Brehm says:—"Rüppell saw it on the Altai and Abyssinian ranges. Jerdon tells us it is common on the Himalayas and is also found in Cashmere and Afghanistan." He also remarks that "This interesting bird is very commonly met with upon the Alps, Pyrenees, Apennines, Balkan, Carpathian and other mountains."

This bird is said to nest in the clefts of rocks; in inaccessible situations occasionally, and Mr. Seeböhm describes a nest in his collection as being elaborately built; the chief materials being moss and grasses, felted together with hair and wool and feathers. It is said that the bird lays from three to five eggs which are pure white, except for small black or deep reddish brown dots, which in many specimens are scarcely visible. The

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\* Its occurrence in Abyssinia is doubted. See Newton Dic. Birds p. 986.

sexes are described as being alike in plumage, except that the black beard assumed by both birds in the breeding season is not so well defined in the case of the female. Of the young I can learn nothing.

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## SOME OLD FRIENDS.

---

So many rare and curious birds have been described lately in our Magazine that I almost hesitate to draw attention to the little inmates of my aviaries. They are birds which may be kept by anyone who cares for small foreigners, and who, like myself, is restricted to keeping seed-eaters, and sorts which will usually agree with others in a mixed aviary.

The Pileated Finches, which won the Society's medal in 1905, are still in faultless condition and splendid health, though they must be getting old: the cock was bought in 1903, the hen a little later in the same year.

They nest regularly every year, but curiously enough have never yet reared a cock bird! Last year two eggs were laid and were hatched, but only a hen lived to grow up, and a beautiful bird she was, but whether the nestling which died was a cock or not I could not tell, it died before it was fledged.

The old birds spend their time—from May till November—in a garden aviary, and build their very tiny fragile nest in a bush in the open flight. Last year it was in a little yew bush, partly protected by the wooden porch of the bird-house. They eat insects, both mealworms and flies, etc., when nesting, also soft food, but when indoors during the winter months they care for nothing but seed.

A favourite nesting material is a rather superior kind of rope, cut into short lengths and pulled to pieces. I find this is in great favour with various other finches as well as our Pileated friends, especially Masked Finches and Bichenos.

My Quail Finches are somewhat puzzling. The cock is very handsome, and was fully adult when he came, and the hen was, I supposed, an ordinary adult hen, just a little brown bird sufficiently shaded to mark her as a Quail Finch. Unfortunately she disappeared from the garden aviary after a few weeks, and

her poor mate who was, and is, crippled in one wing, lived a solitary life in the midst of a crowd, till last summer I got him another hen. She was just like the original one at first, but latterly she has changed so much that I begin to wonder whether "she" is really a hen after all.

These birds must surely take a long time to mature, for this one had been with me for many months before any change was noticed. Now she has developed the white ring round the eye and the white patch under the bill, which I had believed characteristic only of the male, and her markings are now very much more distinct than at first, though still not as dark and clear as the mate's. I have seen a good many of these birds at Shows, but never one as handsome as my old cock, and I conclude that they must either be immature birds or hens. I wish someone would enlighten me. I may add that my two are quite indifferent to each other, partly perhaps because the cock cannot fly properly and keeps to the floor of the aviary, while the hen is active and flies quite well. They spend the summer out of doors and love to run about in the grass almost like tiny Quails.

I have a charming pair of Dufrèsne's Waxbills which have been with me for just two years. They are most lovely little birds, always happy and well, active in their habits and most amiable, but they utterly refuse to nest either indoors or out. I kept them in during the first part of the summer of 1906, hoping that an aviary entirely to themselves might be an inducement, but they looked quite lost in it, and as nearly depressed as it is possible for a Dufrèsne to be, so I turned them out with the others into the garden aviary, where they spent a blissful summer flitting from branch to branch, and basking in the sunshine, never far apart, for they are a devoted couple. I still hope that they may win a medal, for several pairs of my birds have been with me a very long time before attempting to nest, notably some Masked Grassfinches, which reared two young ones last year, and the Pileated Finches before mentioned.

Virginian Nightingales are very showy and hardy pets, and mine have been out all this winter, and the worse the day the more persistently do they remain in the open flight which is really a wired-in flower border. This is not the case with the

Diamond Sparrow or the Yellow-rumped Finches, which are quite aware of the comfort of their wooden house on cold or stormy days. The Harlequin Quails too spend a good deal of time there.

The most charming of my Quails, the tiny Chinese Painted variety, refused to take refuge inside and looked so miserable that they were caught up, and have spent the winter with the Waxbills in the conservatory, perfectly tame and confiding and seemingly quite happy. The little hen has already laid forty eggs this spring, but does not attempt to sit on them. We hope that when she goes into the garden again she may find a nesting site to her liking and manage to bring off a brood.

L. WILLIAMS.

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## NOTES ON MY BIRDS.

By ROSIE ALDERSON.

*(Continued from page 149).*

Since I last wrote in the March Magazine I have had a letter from the gentleman in Jamaica who sent me my Black-bearded Doves. It seems I made a mistake about their habitat, which I hasten to correct. Though they were sent to me from Jamaica they are really natives of Cuba. Quoting from their former owner's letter he says:—"The Black-bearded Doves came to me from Cuba, hence they are hardly common in Jamaica. In Cuba they are styled 'Spanish Partridge.' They laid with me on the bottom of a box hung about four feet from the ground, and employed no nesting material. More than one egg was 'toe-bored,' and the one young bird I had died quite early, it appeared to need its parents some time after it was fully feathered."

This is just what my own birds seem to be doing. They had never nested with me before, but to-day, May 13th, the hen laid an egg in a Parrot's nesting box some four feet from the ground. These boxes were made for me by a joiner specially for the Parrots. The bottom of the box is hollowed out saucer-shape and one side of the box hinges downwards like a door. This I have fastened firmly half-way down so that it now acts



as a broad ledge outside the nest. I put dry heather in the bottom, but the Doves turned it out. The egg was laid a few inches away on the hard wood, and of course was broken. I have tried to make the nest box a safer nesting place since, and hope some day I shall be able to tell you of the rearing of a young Black-bearded Dove.

And now I must take you to my last built aviary. This house is a long way my favourite, and though it has faults, which I should correct if I had it to build over again, still in many ways it is very convenient. This aviary is divided into five divisions, each composed of flight and shelter, which two parts can be shut off from each other. Part of the roof over the flights is glass, part wire netting. The roof over the shelter is of corrugated iron lined with wood. The floor (except under the open part of the flight) is cemented, and an earthenware shallow tank is fixed into each house as a bath, fitted with a plug and waste pipe. These baths all drain into a dumb well, and never get choked or give any trouble.

At the back of the aviary is a wide passage the whole length, one end portion however being partitioned off as a small aviary, the other as a porch and seed-room. I find this passage and seed-room most useful for storing food, and everything else of the many articles wanted in an aviary. In the passage are two large cages let out in the wall. They reach from floor to ceiling and are so arranged that they can be divided into either two or four cages as may be required. One is at present tenanted by four sweet little American flying squirrels, but these are not subjects for a bird magazine so I must leave them alone. I find these cages very handy for birds that will not stand roosting out at night in winter, or for sick birds. The cages, as I said, reach to the floor, but, as it would hardly do to keep birds so low down as this, I have made the bottom part in one place into a cupboard for storing sand (of which we use a good deal) and the other for keeping the coke for the fire in. These most necessary articles are thus kept neatly out of the way, and having a good supply on the spot saves many a journey, for the aviary is a long way down the garden, and the coke and sand have to be carried a considerable distance.

The heating is done by a coke stove, the coke used is small, about the size of walnuts. I get it through the blacksmith, it being the same kind as he uses for his forge. It is rather an expensive quality of coke, but I prefer to use it as it is practically smokeless, and thus not a nuisance to our neighbours. The fire is kept going night and day in winter, and, besides keeping the birds warm, prevents the food stores from spoiling with damp. A long strip of canvas stretches across the flat wire roof of the flight, and helps to keep out the snow and cold. Later in the year the canvas is just moved higher up on the glass roofed part, where it acts as a shade, for the nests are often built very high up, and the glass gets burning hot in summer.

Inside the aviary is whitewashed and painted pale green and cream colour—which shows up the plumage of the birds very well. Outside is painted dark and light green, and roses and ivy trained up the walls. Every year large boughs of Scotch fir (the only fir that I find will retain its needles) are fixed to the walls of the shelters and glass covered part of the flight. No branches are put really in the open, so no nests are ever built there, as I do not like the idea of sitting birds or young ones being exposed to wet weather.

Doves make such poor nests that I fasten up zinc nest pans in the boughs—and put inside each nest some dried heather—with plenty more material scattered on the floor, and this is constantly supplied to the birds all through the summer. The heather, which is of a special kind, I procure yearly from F. Hiscock, Ashley, Ringwood, Hants, who sells it at a reasonable price. Of course there is always a good supply of ground egg shell as grit in the aviaries—especially in the nesting season. If I see any bird likely to nest I just scatter some grit on the floor, besides what is always in the pan for the purpose. For often a bird will pick up what is just in front of it, when it will not trouble to go any distance to procure it. Years ago I bought an “Enterprise” grinder from Messrs. Spratts and have found it invaluable for grinding shell and biscuit. The size ground can always be regulated, but with the biscuit I always sift it afterwards (in a wooden box with a perforated zinc bottom) and the small crumbs and powder come in very useful for mixing with

the soft food. I much prefer it for this purpose to grated carrot. In addition to their seed diet of wheat, hemp, dari, white millet, and a little rice—the Doves are very fond of shelled and cut up monkey nuts (which I get from Messrs. Armitage, seed merchants, Nottingham) and ground biscuit. I use a kind of biscuit called “President,” and the price per  $\frac{1}{2}$  cwt. is about 16/-. I think these two kinds of food are very good for the Doves, besides seed—for they always seem to keep well and in good plumage—and some specimens I have had for many years now.

Every night a canvas curtain drawn on a wire with rings is drawn across the open front of the aviary. It keeps the birds quiet at night, and also keeps out the cold. I cannot keep more than three pairs of nesting doves in each division of the aviary: to try and keep more would only mean that if any young ones were reared the space would be far too overcrowded, and the later nests would come to nothing. As it is I have to take the young ones away when they are getting a good size and place them in another part.

In No. 1 division live a pair of the Bleeding Hearts, a pair of Brush Bronze-wings and a pair of Rufous Pigeons. These latter are very rare and the original pair was sent to me from Jamaica; their name was unknown and they had in the first place come from Barranquilla in South America. Later Mr. Newman, who is most kind in identifying any rare birds for me, identified them as the Rufous Pigeon (*Columba rufina*) from the skin of the old cock, which I was so unfortunate as to lose. Before this bird died the pair reared one fine young one—a cock; then they nested again, and when the second young one was only a few days old the original cock died. Just afterwards the second young one fell out of the nest and was picked up cold and almost dead. To my surprise, after a time the warmth of my hand revived it, and finally, under the care of some Barbary Doves, it grew into a fine bird. When nearly full grown, however, it died, I don't know from what cause.

This left me with only the old hen and the young cock. They nested and have had several fertile eggs—always one egg only being laid at a sitting—but some months ago the cock began to suffer from lumps or tumours coming in his face. Up to then

he had been particularly strong and in fine plumage. I expect the mischief started in the first place from the bird bruising itself some time against the wire-netting, for these Rufous Pigeons are very nervous birds. It was partly fright at being caught to be doctored that killed the old cock bird, and the young one has once or twice had a fit after being handled. Seeing the bird was only getting worse I at last caught it and sent it away to be operated upon. The operation was most skilfully done, and the bird came back to me showing no scars and with its head a proper shape again. I believe several tumours were removed, one being so close to the eye as almost to press on the eyeball. The eyes of course were left a little weak, and possibly it may have been the cold winds we have had this spring, but the bird's sight a few weeks ago began to be affected and both eyes very swollen and inflamed. Little by little his sight went, till at last he was so blind with both eyes as not to be able to see to rise from the ground. The dove's strength began to fail, and that sign of weakness in a bird, a contraction of the toes, as if the circulation was failing, began to show. I put down a bed of hay and some food and water near and thought I had better leave the dove to die. I dreaded catching him, and it only seemed like torture to try any remedy, but he looked so piteous—listening on all sides and turning his sightless eyes to try and locate the sound—that I determined to do what I could, though I had little hope. On the aviary medicine shelf in the porch I keep a bottle of boracic lotion, the formula of an oculist, and with this lotion in a little warm water I bathed the Rufous Pigeon's eyes; at first three times a day, now, after some weeks treatment only once. I am thankful to say the bird has well recovered its sight with one eye, but the other eye I am doubtful of, though it is very much better. There is a small ulcer on the eyeball and it remains to be seen if the sight comes back. It is strange how the colour of the eye went and has now returned. One of the prettiest points about the Rufous Pigeon is its very bright ruby eyes. In the eye that has recovered, the colour is almost perfect again, but in the other it is at present faded and pale, though improving. When first I began the bathing both eyes were closed and so terribly swollen that the shape of the head was quite distorted,

the eyelids standing out as if peas had been forced under the lids ; by now the swelling is quite gone on one side and nearly on the other. Most fortunately the bird could always eat, though how it found its food I don't know. It is a good plan when you put a blind bird in a cage to place the seed in a shallow dripping tin (a fair size) and stand the patient *in it*. It will *feel* the food then, and if it has any intelligence will learn to pick it up.

Now in doctoring birds a little thought is needed, both to save yourself trouble and the patient pain, and as knowledge only comes from experience, and these notes are only intended for *beginners* in aviculture, it will perhaps not be quite wasted space to tell you how to nurse a case of this kind. First, before you catch the bird, get all your things ready on a table. I have a broad table shelf under the window in the little seed room, and on this shelf I arrange my things. You need a small clean pot partly filled with lukewarm water—cold water would chill the eye too much—and to this add about a third more of boracic lotion. To bathe the eye use a small piece of medicated cotton wool, and when bathing do not touch the eye which will be very tender, just squeeze the lotion over it. When the bathing is done press the wool dry and with it just mop up any drops that may have fallen on the feathers. Be sure, and this is important, to use fresh lotion and water and fresh cotton wool *every* time you bathe the eye, don't make an old lot do twice.

This particular Rufous Dove is very difficult to hold and he gets worse to manage as he gets better ; he is a big strong bird and very nervous. It is impossible to have a bird loose in an aviary that you want to catch three times a day, and an ordinary cage is awkward, as one cannot get both hands inside the door, and I cannot catch so large a bird with one hand. The best plan is to have an invalid box. This you can easily make yourself out of any old wooden box about 20 inches by 14 inches and 12 inches high. Take off the lid and all round the inside of the box tack strong paper to prevent the bird cutting its wings against a stray splinter or the roughness of the wood. Fix a perch, nearly touching the bottom across the width of the box ; broom handles, unpainted, and costing twopence each, make excellent perches when cut up, being just the right width for

doves. A piece of cage fronting of wire, rather larger than the top of the box forms the lid. It should be laid loosely, not fastened on. What would be better still would be a wooden frame covered tightly with strong string netting, as there would then be no fear of the bird knocking its head if it jumped upwards. I think it is better not to put sand on the cage floor, it might get into the bird's eyes if it fluttered, but have some pieces of newspaper folded rather smaller than the bottom of the box, and slip a piece under the perch (which being low helps to keep it down) every morning. This should be done and fresh seed and water put in before the bird is returned to the box after its eyes have been bathed.

The lid of the box must be loose, not in any way fastened down, as you want to get your arms under it when catching the bird. In catching use both hands, and get the thumbs well over the back keeping the wings down. You can manage to get the bird out of the box quite well by raising the lid with your arms when you have once caught the bird. It only needs a little practice and I do it all myself every morning, fresh food, paper and water, besides the actual work of bathing the eyes.

When you have caught the Dove hold it in your left hand against your side, the thumb still over the shoulder, the first finger across the breast, whilst the second finger acts as a perch for the feet. The bird held in this way is quite comfortable, but a safe prisoner and cannot get away. In bathing the eyes don't hurry—if the bird begins to jerk after a bit let it have a few seconds' rest to quiet down. When you have finished with your free hand put in the food and fresh paper (of course removing the old) and put back the lid on the top *before* you replace the bird. You can now raise the lid with one finger and with both hands carefully put the bird, its back towards you, on the perch, when it will probably be quite quiet. You may think all these little details unnecessary, but if you try to replace the patient with one hand it will most likely struggle, and if you try to put the bird in first and the box lid on afterwards the bird will probably get away whilst you are doing it.

Sometimes, in spite of all your care, the Dove will rub a shoulder raw if it tries to jerk about every time you catch it.

Either vaseline or "New Skin" on the wound is an excellent remedy. The latter is a liquid antiseptic court plaster, which you just paint on with a brush. It is most useful for cuts in humans as well as in birds, and so easy to apply, but must be allowed to dry on the wounds, which it does in a few minutes. Of course any dirt should be well washed out first before the "New Skin" is put on.

After a little practice you will soon find you can cut overgrown beaks and claws and dress wounds, holding the birds as well as operating yourself. I much prefer having no one to help me, but in the case of setting a broken leg one is obliged to have assistance.

I have been keeping the Rufous Pigeon in the passage where there is no strong light to try the eye too much. He will soon be turned into an aviary but not be allowed to be with the hen for sometime till he is a stronger. At the time I had to catch him up the birds were nesting. The hen bravely continued to sit herself for a few days, but finally deserted the egg, which turned out to be clear. The Rufous Pigeon is a very handsome bird, reddish purple in colour, with a grey head and most lovely metallic green on the top of the head and neck; the eyes are very bright ruby red.

I have just lost a hen Bleeding Heart Dove in this No. 1 division. She was a nice bird, but very nervous and I believe died partly through fright of the cock. Bleeding Heart cocks get very vicious sometimes at the beginning of the nesting season, and harass each and every unlucky bird who crosses their path. Doves do not often kill each other like parrots, but they are very quarrelsome. Sometimes I have seen a dove pecked and plucked by other doves till its life was not worth living, but when the tormented one was removed in pity to another house it has at once turned on its new companions and itself acted the part of a bully.

Some birds are naturally aggressive. I remember an ancient Parson Finch we had, too old to fly from the ground, who made a point, old as he was, of always jostling any new comer into the aviary who settled on the floor. He did not really hurt them, but tried to push them about in a most unpolite

fashion. In No. 2 division of the aviary there live three very well-behaved pairs of doves. Bronze-wings, Rufous Doves and Solitary Ground Doves. I have had all these six birds for years, and for long they have lived happily together, and every year they nest and bring up young ones. So far I have only one young one in this house this year, a little Rufous Dove, but I fancy the Bronze-wings have hatched, as I saw an eggshell on the floor a day or two ago. In a few days I shall put a good bed of hay under the nest to save the young ones hurting themselves on the hard floor when first they come out of the nest, further when they are once out the hay makes a cosy place for them to sit in. Dryness and warmth are very important for young birds, and it takes so little to chill them.

In No. 3 division are an odd Bronze-wing and a pair each of Bleeding Hearts and Madagascar Turtles, the latter very handsome birds in colouring rather like the Barranquilla. The Bleeding Hearts have made a huge nest of dried heather, but so far no eggs are laid, though I now and then see one of the birds on the nest.

Into this division I had moved my Bronze-necked Doves, but the little cock turned so bad tempered in his excitement over nesting that I was obliged to take him and his mate away. I one day saw him plucking and beating one of the Bleeding Hearts, though it was much larger than he was, until the poor thing was so bewildered it did not know how to protect itself. Usually I find that the smaller doves are very bad tempered. One little Picni cock I had was a terror, and thought nothing of attacking a dove three or four times his size. It is always as well when turning a fresh bird into an aviary or making any re-arrangement in the birds to keep a strict look out for a day or so. Usually if any fighting is going to take place it will begin within a few minutes, but if the birds are quiet together for several days they will usually remain so all along and give no trouble.

*(To be continued).*

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## NOTICES OF NEW BOOKS, ETC.

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The May number of *British Birds* brings to a conclusion the first volume of this admirable periodical, and we congratulate the Editors upon the many highly scientific facts brought before the public in its pages.

The present number contains a valuable article by Mr. P. H. Balr on the development of a young Cuckoo, illustrated by numerous photographs of the bird taken at various ages. Messrs. C. J. and H. G. Alexander publish the result of their observations during the past three years on the Song-periods of British Birds. Mr. W. P. Pycraft discusses the bearing on the simple nest of the Ringed Plover on the evolution of Birds' nests in general; his interesting article being illustrated by photographs of five types of the nest of that bird. The part concludes with a number of Notes, a review of Godman's "*Monograph of the Petrels*" and a letter respecting a wounded Peregrine fed by its mate.

A. G. B.

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Our member, the Rev. W. J. Constable, has sent us the Report of the Uppingham School Natural History Society, the Ornithological Section of which occupies the best part of nine pages, a nearly identical space being devoted to Entomology (or more strictly speaking to Lepidoptera, no other Orders being dealt with).

There are observations upon seventy-five species of birds, some of which are interesting if authentic; for instance, a Wren's nest is described with seven young and one egg—a not unusual occurrence in the case of our Blue-Tit (which has undoubtedly often been mistaken for a Wren) but personally we never yet found a Wren's nest with more than six eggs: it would be interesting to note whether the nest was in a hole; both this and another nest with eight eggs were seen in Stoke Wood. The full complement of eggs in Tits' nests is not infrequently eight, and sometimes the whole are reared.

The generic names should have been printed with capital initial letters and in the Lepidoptera they should have been given in full (the specific name of the Meadow Brown is usually spelt *janeira* not *janira*).

There is not the least doubt that the principals of our schools throughout the British Islands are doing excellent work in training their pupils in Natural Science, and they deserve every encouragement. Fifty years ago education was either classical, with a view to the three professions of divinity, law, and medicine; or was wholly commercial; now, happily, all is changed for the better, and a youth can study Natural History without being regarded by every passer by as a harmless lunatic.

ED. *pro. tem.*

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## CORRESPONDENCE, NOTES, ETC.

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### THE USE OF GENTLES AS A FOOD FOR BIRDS.

SIR,—Can any of my fellow members tell me what has been their experience in regard to the use of “gentles,” by which we mean the larvæ of the Blow-fly? I particularly wish to know whether any objection has been found to the use of the gentle—either alive, after they have been well scoured, or after they have been scalded—in bringing up young cage or aviary birds, or as a substitute for the useful, but rather expensive mealworm as part of the diet of adult soft-billed birds. I have known them used with satisfactory results when scalded, by keepers, for young pheasants at the coops; but my own experience of the gentle in the cage or aviary is very limited. I believe Mr. Seth-Smith used gentles alive, but well scoured, in rearing the Quails, Tinamous and Hemipodes with which he has been so successful. But if a substitute for the mealworm, as attractive, but less stimulating and heating, it would be a great help to some of us when we are trying to rear young of the insect-eating birds. In the case of some, for instance, Rock-Thrushes, I have found that the parents, though quite ready to visit the pan of ants’ eggs, yolk of egg, etc., for their own purpose, are unwilling to take anything but live food up to the nest.

W. H. ST. QUINTIN.

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SIR,—A Pied Blackbird with rather an unusual history has lately come into my possession. It was found frozen in a field at Wickham, late last November, by a man who picked it up for dead. Seeing it was an uncommon bird he thought he would have it stuffed, and put it in his pocket to take it to our Bromley naturalist for that purpose.

When he reached his destination and took the bird out of his pocket it was seen to move, so Mr. Dell, thinking he might be able to restore it, paid the man for it and kept the bird. It recovered, but its feet were

useless, and at the end of six weeks it could only walk upon its stumps; the toes being rolled up into a ball. Mr. Dell then cut it out some cardboard shoes, properly shaped, and bound the toes to the cardboard with cotton wool, which was kept in place by Seccotine. After the Blackbird had walked about on these improvised snow shoes for some weeks the feet were unbound, and the bird immediately hopped up to a perch. Now it can get about very well from perch to perch, and down to the bottom of the cage and up again, and it roosts like any other bird. Of course the feet are somewhat deformed but quite useful, and the patient seems to be in perfect health. The plumage is a good deal knocked about owing to the unusual life it has had to lead, but it is a pretty bird and, if it continues to do well, will no doubt improve in feather very soon. This "Blackbird" has a grey head, white round the beak, a white breast mottled with very dark brown, the wings appear to have alternate feathers of black and white, the tail has a white centre with outer edges black, but as several feathers are missing from this appendage I cannot describe it accurately. The eyes are dark and very handsome. The beak now partly black and partly yellow. Sex unknown at present. It was supposed to be a cock, but a scientific friend of mine inclines to the belief that it is a hen. I suppose from Dr. Butler's remarks in our March number pied hens are more rare than cocks. My bird at present only makes the shrill call, answering I suppose a cock Blackbird which lives in the room close to it, and which is an accomplished singer.

E. E. WEST.

#### BULLFINCH LOSING FEATHERS.

SIR,—I should be much obliged if anyone would tell me the reason of my cock Bullfinch having lost every one of his wing feathers in a night. The bird is one year old and in perfect health otherwise. A hen Bullfinch of the same age has been fed exactly in the same way, and this has not happened to her. Perhaps I had better mention that they never have more than two hemp seeds a day.

F. HAREWOOD.

#### CHAFFINCH AND CANARY HYBRIDS.

SIR,—We are told that "seeing is believing" and although a little corpse, I send you one of the Chaffinch-Canary which died this afternoon (the other one is still alive and a fine bird). The beak and the dark line down the back of the wings I think are odd.

The live bird is larger, and has a pale beak, but its skin is a darker colour; the head and wings are yellow. I hope it will live. I have had several people in, during the pairing and incubation, who can give evidence, if I can rear the bird which is left, and I have taken every care that no other male bird was near the hen which laid the eggs.

ALYS GORTER.

The dead bird was only just commencing to produce its quill feathers,

most of its body being bare or nearly so; but had it lived I imagine that, with the exception of its beak which was larger and heavier than one sees in pure-bred Canaries, its colouring would not have been strikingly different from many ticked or pied Canaries; the dark-skinned bird, if it should be reared, would I think show the Chaffinch characteristics more distinctly.

ED. *pro. tem.*

---

SIR,—My Bar-shouldered Doves (*Geopelia humeralis*) laid some time ago with no result: now they have laid again and hatched out. I do not know if there are two, or only one, as I find it is a bad plan to disturb birds nesting, though some people think otherwise.

I see Mr. Newman mentions in his article on the Madagascar Turtle-dove that he failed to notice the 'greenish' tinge in the young birds. I noticed this in my young birds, two of which are now flying in the aviary.

The Choughs have laid again and one appears to be sitting, with what result I am anxiously waiting for.

C. CASTLE-SLOANE.

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## POST MORTEM EXAMINATIONS.

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Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lauherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, and a fee of 1/- for each bird. If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons and Canaries can only be reported on by post.

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*Answered by post:*

LADY LILFORD.

COUNTESS OF SOUTHESK.

MR. W. S. O'REILLY.

HON. MARY C. HAWKE.

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### III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

#### NEW MEMBERS.

Mr. TREVOR OLIPHANT; Teston Rectory, Maidstone.

Col. PORTESCUE; Falmouth House, Newmarket.

Mr. P. S. HOZTE; Dunlewey, Seymour Road, Plymouth.

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#### CANDIDATES FOR ELECTION.

Mr. HANLEY; Lloyd's, London.

*Proposed by the Hon. Business Secretary.*

Mrs. DAWSON; 14, Bryanston Square, W.

*Proposed by Dr. BUTLER.*

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#### CHANGE OF ADDRESSES.

The Lady GRANT DUFF; to East Soham Grange, Framlingham, Suffolk;  
and

The Rev. JAMES SMITH; to The Vicarage, Baslow, S. O. Derbyshire.

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#### MEMBERS' SALE AND EXCHANGE COLUMN.

*The charge for private advertisements is SIXPENCE FOR EIGHTEEN WORDS OR LESS, and one penny for every additional three words or less. Advertisements must reach the EDITOR on or before the 26th of the month. The Council reserve the right of refusing any advertisement they may consider undesirable.*

Indian birds brought by advertiser in April—cock Redstarts (perfect), 1 Blue-fronted, 2 Plumbeous, £5 each; 2 Himalayan Whistling Thrushes, £4 and £3; 2 Greywing Ouzels, £8 and £6; Grey-headed Ouzel (*Castanea*), rough, £2; Laughing Thrushes, 4 White-crested (rough), 1 Him. Streaked, 1 Spectacled (?), 30/- each; 5 Black-headed Sibias, cock Dayal, 2 Gold-fronted Chloropsis, 30/- each; true pair Blue-crowned Parrakeets, 50/-; pair Rosy Pastors, perfect, 30/-; Pied Starling, 12/6; 2 Punjab Red-vented, 3 White-cheeked Bulbuls, rough, lot 30/-; 1 Black-throated, 2 Jerdon's (rufous breast) Accentors, 1 Indian Pipit, 15/- each; Buntings, 1 pair Crested. 2 pairs Aureola (?), 3 pairs Black-headed (handsome black, yellow and chestnut), 30/- pair; Pink-browed Rosefinches, 1 cock, 2 hens, lot 30/-; Him. Linnet, 10/6; 6 Rain Quails, 10/6 each; 2 hen Bustard Quail, 12/6 each. Offers considered for selections; and for the following with bad feet: White-capped Redstart, cock Him. (White-tailed) Ruby-throat. WANTED—in true adult pairs, Bonrke's and Yellowrump Parrakeets, Peach-faced Lovebirds, Parrot Finches. Delivery can not be taken yet.

Captain PERREAU, 12, Sion Hill, Bath.

*(Continued on opposite page).*

**JOHN D. HAMLYN,**  
**NATURALIST,**  
**221, St. George's Street East, London.**

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## THE JOURNAL OF THE AVICULTURAL SOCIETY.

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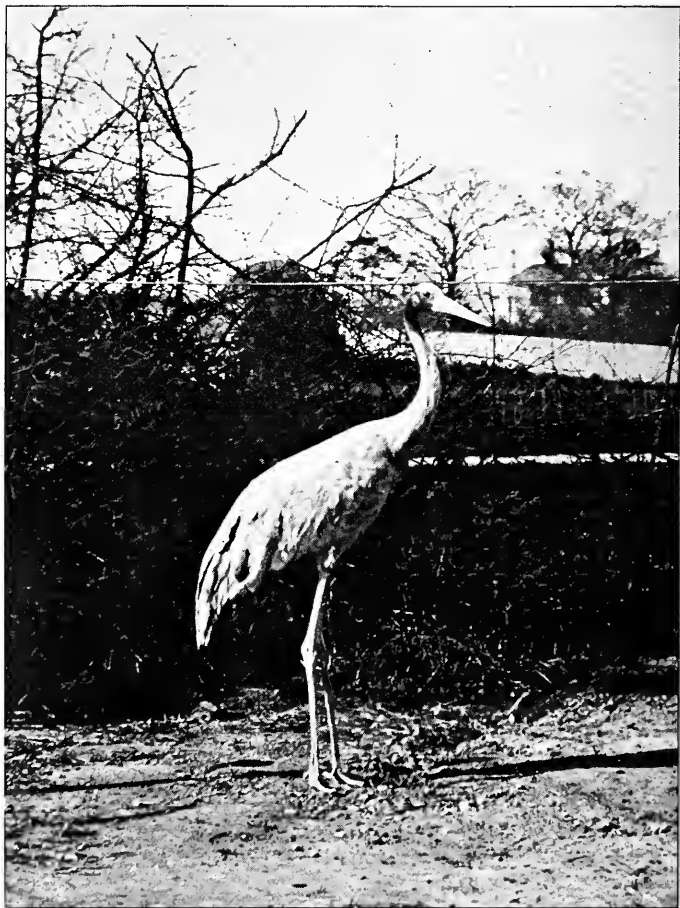
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(Continued on page iii. of cover.)







THE SARUS CRANE  
(*Grus antigone*, Linn.)

# Avicultural Magazine,

BEING THE JOURNAL OF THE  
AVICULTURAL SOCIETY.

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JULY, 1908.

## THE SARUS CRANE.

By C. BARNBY SMITH.

The accompanying photo of my male Sarus Crane may be of interest to some of your readers. Sarus Cranes do not appear to be commonly kept—perhaps on the ground that they are large birds and require a good deal of room. A rood of land is not too much for a pair, if it can be given, as they delight to take long runs with wings outspread. They also spend a good deal of time hunting for worms, insects, etc., and, if given a lot of loose turf sods spread out and cut small, will constantly be pulling them about whilst searching underneath.

I feed my bird three times a day on mixed corn (one fourth part split maize) the rest wheat, husk-rice, darr, &c. This seems to answer well. In very cold weather I give a little raw meat. A mouse or small sparrow is not despised.

The Sarus Crane is a bird of temper, and my bird speedily tried to kill a pair of Demoiselle Cranes which I put into his run. He, however, lives peaceably with various pheasants, not taking the slightest notice of them unless they get in his way at feeding time. They soon learn discretion.

The breeding of Sarus Cranes in England seems to be a delight reserved for future generations, as Mr. Astley has nothing to record and the Duchess of Bedford only mentions one bird as being hatched at Woburn Park. However the old birds are most stately and graceful in form and of a lovely gray colour.

In India the Sarus is generally seen on the plains wandering about cultivated fields near some "jheel," and stands the hot weather without migrating. These birds can, however, also

endure severe cold and will stand an English winter without any protection, or shelter.

They usually have only one young one, and there is a popular superstition in India that they mate only once in their lives and pine if the pair bird is killed or dies. On this ground they are held more or less sacred and not usually shot. The young are caught and tamed.

The Sarus is not so noisy as its relative the Australian, or the Common European Crane.

To give an idea of size, I may mention that the cross wire appearing on a level with the bird's head in the photo is 4ft. 6in. from the ground.

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## THE BRITISH RAILS.

By PERCY W. FARMBOROUGH, F.Z.S.

My friend Dr. Butler has been good enough to honour me with a request for an article this month, and in deference to his wish I offer these remarks on the two species of British Rails that most people are more familiar with than the other kinds, but which, still for all that, they do not often take the trouble to keep in captivity.

During the past three years, through the kindness of a friend who is possessed of a small well-sheltered pond—a house agent would describe it as an “extensive lake”—in a secluded estate some few miles from a railway line, I have been able to study many of the different shore or wading birds, as well as many others which do not, strictly speaking, come within this category. Although during the past ten or twelve years I have taken up mammalian pets more than others I have not entirely neglected my feathered friends, and any creature that can reasonably be called “uncommon” has always possessed a greater interest than those others which are usually kept in captivity.

The Corn Crake (Land Rail) and the Water Rail are both common birds in this country, and yet very few people seem to see either, and still fewer ever take sufficient interest in them to keep one or the other in confinement. The first, if not often seen, is frequently heard, for its call of “crek-cre-ek-k” is one

of the most familiar sounds during the spring in the fields, and the principal difficulty one labours under is that of locating the bird; first of all it sounds as though the call was only six or eight yards away, in a moment or two it sounds as if it were made at a distance of a hundred or more yards away; at one time it seems as though the bird were on the right, next it sounds as if it had suddenly got to the left of the listener, so that it is not by any means an easy bird to get a glimpse of. The call of the Corn Crake has a somewhat different sound when the bird is kept in an aviary, and is more like the "quacking" of a young duck than the sound which is heard in the open fields.

The Corn Crake or Land Rail (*Crex crex*), or Quaker Hen as it is sometimes called, is the commonest of the four species that have undoubted British rank, the others being the Spotted Crake (*Porzana porzana*), the Little Crake (*Zapornica parva*) and Baillon's Crake (*Porzana intermedia*), all these three are uncommon, the last two extremely so. The Corn Crake is widely distributed from May until the end of September throughout Great Britain, and may be found in almost any meadow which is left for hay. I have written "found" but it would be better to say "heard," for it is by no means an easy bird to find even when heard, especially if the hen has begun to lay. I have kept close observation in a hay field day after day without finding where the birds were, (I had been asked not to walk over the growing crop), for of all the sly skulking birds the Rails are the cleverest, they seem to be able to sneak through the growing hay without appearing to disturb a stem; and then it was a farm hand who found the nest and hen during the mowing. The field was one of the first to be mown and the young when found with the hen could not have been hatched very long; five were caught, the rest with the hen escaping. The colour of the down of these little mites was bluish- or ashy-black, not, as I had read and expected, quite black. It was some few hours before I could get down to the farm and they were pretty hungry when I arrived; but in spite of all my endeavours they refused to take the ants' eggs and egg yolk I prepared and, as it was dark, no live insects could be got. At four the next morning when I looked at the open box in which they had been put with some hay, three were

dead and, although the remaining two had a few insects almost directly, they had gone before breakfast was over. Of course it was the delay which took place before it was possible for me to get down to where they were and feed them, as well as having to wait until morning before insects could be procured that caused the death of these mites; thus ended the first experiment.

A few days later, after I had left, I received a letter which said: "Another nest of young Crakes found yesterday; don't worry! Joe\* is feeding them up with that 'stuff' you left and says they are taking it well." This was good news for three reasons: first that another nest had been found, secondly that there was someone there who could look after them, and thirdly that they were feeding, as it so happened that I could not leave owing to an official engagement that prevented me going down into the country, so that I felt quite relieved to think that possibly things would continue to go until I could get to the farm and see what was happening. It was nearly a week before I went—two letters having arrived in the meantime to say all was well—and then when I arrived Joe met me at the station with "Well, Maister Farmborough, I'se done th' trick for ye and gotten them on foine! you'll be main pleased when you sees 'em, I'll lay." And so I was for he had got four perky young Crakes about three weeks or so old, as tame and cheeky as could be with him, but a bit nervous of me when I tried to feed them or, to be more correct, put the food in the Tate's sugar box for them, as they were picking for themselves.

After a few days I had them transferred to an aviary I had had constructed by the kindness of my friend the owner, by the lake, so as to have a part of the water enclosed. It was a very cheaply erected structure, of tarred posts and wire netting; advantage was taken of two trees which stood six yards apart, not quite ten yards from the water's edge, to make them one end of the aviary, the other end being five yards in the water, which was rather shallow just at this spot. The chief item of expense was the wire netting, which took more than I had at first judged; but as my friend told me to order what was wanted and said he'd pay for it, it practically cost me nothing.

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\* One of the farm hands.

After being turned in a few days they became quite wild again, as is the case with many birds when turned into a large enclosure. They however ate all the food that was put in for them, and although smaller than the Water Rails which were also in the aviary, would not let the latter feed from the dish at the same time but drove them away every time they approached the food vessel. Both kinds of Rails fed on the same food, which was rather a messy looking mixture of bread and milk (the bread being wetted only just enough to crumble up nicely), ants' eggs, mealworms, a little raw meat and a couple of raw eggs broken over all and mixed up. There were plenty of slugs, snails, and worms to be found in the enclosure and these no doubt eked out the food supply.

I was not down at the farm in the September of that year, but word was sent to me that the Land Rails were extremely restless and that one had severely battered itself against the network; in the following month I saw the birds and two were extremely wild and evidently suffering from a bad attack of migratory fever; the other two fairly quiet. The restless ones were damaging themselves considerably about the head and shoulders and so I thought it better to let them go whilst they could still fly properly, so I caught them and released them outside the aviary. They flew away strongly and I trust were strong enough to reach Africa safely. The other two passed through the winter safely and commenced their characteristic call in March.

One thing that struck me was the habit of bathing in the shallow water at the edge of the lake, a matter which seemed to give them great pleasure judging from the whole-hearted manner with which they performed the operation. There were some very small fishes in the lake and it was most amusing to watch the Crakes run along the edge of the water chasing the "tiddlers," usually unsuccessfully, but occasionally their exertions were rewarded by the capture of one of the "laggards."

*(To be continued).*

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## THE WEATHER AND OUR SUMMER BIRDS.\*

By P. F. M. GALLOWAY.

It is interesting to note the habits of our wild birds and the effect the weather has upon them.

As our last real spring and summer weather took place in 1906, it allows us a fair time of unsettled bad weather to note its ill effect on birds of the insectivorous species especially.

During the spring and summer of last year (which never arrived) our summer migrants had a bad nesting season. They arrived here well to their time and we had a fortnight of brilliant warm weather at Easter, which was, as we all know, earlier last year than this, and that warm settled weather came with the wind in the N.E. from the very quarter that is bringing Arctic weather now. After that fortnight, with the exception of an hour or two of sunshine and this at long intervals, we had nothing but overcast, cool, windy, and rainy weather until the grass was cut, somewhere about the end of June or early July, farmers then had about a fortnight of fine warm weather in which to make their hay, and those that did not make it then must have made manure of it, for we had dull gloomy damp weather from that time right on to the end of the first week of September, when the harvest had begun, the remainder of that month being fine and practically speaking the best month of the year; after the harvest the same dull weather prevailed and there was hardly a day passed in which it was not blowing roughly, cloudy and rainy. The strawberries ripened last year it is true, but they were ripe one side and covered with mildew the other. The effect the weather of last year had upon our summer migrants was this:—The continuance of cold and absence of sunshine prevented the old birds from rearing all their young, for they could scarcely find sufficient live insect food to keep themselves upon, to say nothing of rearing a brood of young. I found several nests of Tree Pipits, Willow Wrens and even Tree Creepers, all the young dead in their nests, and I have no doubt there were many more that I did not find in the same

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\* Written in April, 1908, at Reading.



state. On examining the birds I found the young were in very poor condition from want of food and had died from starvation.

A few of the nests contained young of about four or five days old, but most of those found dead were young just showing their feather, this is easily accounted for. While the nestlings were very small, they did not require such a large quantity of food, but as they struggled on to the stage of feathering, the demand for food was greater and as this could not be found in sufficient quantity the young had to go under.

I also picked up several adult birds, Lesser Whitethroats, and Willow Wrens, which I had no difficulty in catching, as they were in a weak state, and on examination found them in a very poor and ill-nourished condition.

Young Wrynecks in two instances I found drowned in the holes of trees where they had been hatched, these being well-feathered. So much for 1907.

In January, February and March, 1908, we had the same dull dreary weather with a few days on which the sun shone, and when it has shone, the air has generally been cold and clear on those days.

I looked about at the end of March in vain for the Wheatear, which I have found on several occasions by the 28th of February; we reached April, but the old-fashioned true April shower was missing, the April shower formerly consisted of a heavy shower, with sometimes a clap of thunder and the next minute the sun was shining bright and warm, the trees sparkling with drops of water on leaves and twigs, with probably a rainbow in the sky, now it was replaced by a sopping wet day, and the sun if it did condescend to shine, had little warmth.

On the 3rd of April I heard in this district of Reading, Berks, the first Chiff-Chaff, a fortnight late in its arrival. On the 6th I heard and saw three Blackcap Warblers, this species being a week earlier than usual. On the 10th I went to a certain place where I have never failed to hear and see the Nightingale for the past 15 years, but up to the time of writing this article I have not heard or seen it, although I was informed by a farm labourer that he heard one on the 21st inst. On the 10th I heard a few

Wrynecks, the 21st the Cuckoo was heard, and yesterday the 24th I saw one Tree Pipit, which sat within six feet of me and looked as though another twelve hours would end the poor bird's existence. On the 23rd, during the blizzard, I saw two Swallows, these could scarcely fly and were only able with difficulty to clear a low hedge; so starved and numbed with cold were they that it is impossible for them to have lived through the night.

This season a very few migrants have arrived, but one thing is certain, that few if any of the smaller migrants that have arrived can be alive now. The Wryneck, whose food consists solely of small insects, principally ants and their eggs, cannot possibly have lived until to-day. The Swallow, which feeds entirely upon winged insects, must share the same fate. Even the strong Green Woodpecker can with difficulty live through heavy snow and frost, as its food supply, being ants, is entirely out of its reach, and those birds of this species that do struggle through severe weather are just those that are hatched and reared in woods containing the large nests of the wood ant. These nests are composed of nothing but small sticks and the needles of fir trees, and into these nests the bird probes in winter until it reaches the ants, which are often over two feet down from the surface of the earth, and there in the winter may be seen holes large enough for a rabbit to enter, where the Green Woodpecker has reached the insects, which are to all intents and purposes hibernating below the reach of frost; but the Wryneck only devours the small black and the red ant, whose nest is composed of particles of earth brought to the surface by these insects, and these (although we are nearly into the merry month of May, which by-the-bye, is only to be seen on a canvas in the Art Galleries) cannot be had.

There is one species of summer migrant which may get through this terrible weather, the Blackcap Warbler. Its food consists largely of berries, as well as insects, and as its favourite food, on its arrival in this country, is the ripe ivy berry, it may share a better fate. There is a plentiful supply of these berries and strange to say a plentiful supply of these beautiful songsters, in fact they are more plentiful than any of our summer visitors up to the present time. There is one thing I have always

contended, and I still contend, that the bird in captivity, properly kept and properly fed, by those who thoroughly understand the subject, is far better-off than the bird at liberty; no doubt this sounds strange.

I kept a Swallow, the first I ever attempted, for nearly seven years, in the most perfect health and condition, and the bird was always in lovely feather and even sang, and birds do not sing because they are unhappy. This bird had a large aviary to fly and exercise in, would feed from my hand, and I consider that that bird was far better off, under my care during those seven years, than it would have been at liberty, for in its wild state it would have had to stand the chance of probably being shot at by some ignorant pot hunter who shoots at everything, there would be our uncertain climate to face, also vermin and many other things, including the long and trying migration.

It is wonderful what good weather prophets birds are, and anyone who takes a keen interest in these matters and is a thorough observer of these things, will notice it. For instance the Fieldfares, Redwings and Bramblefinches which arrive here about the first week in October from the far north and take the place of our summer migrants, which have then left our shores and gone South for the winter, generally leave for their return journey to their northern home to breed about the 7th of April. This year they have appeared in large flocks and for the past three weeks have been calling loudly, just as they do in winter on the approach of cold weather. Evidently they were compelled to remain here, although the strong instinct of migration was in them and their time to go under ordinary circumstances, had arrived. We see now, and before the barometer could tell us, why they stayed. It is certain that they could not have forged their way north through this arctic weather to probably find their breeding quarters frozen up and so they have been compelled to prolong their stay with us.

What I have written is nothing but absolute fact, based upon my own personal observation and I have studied ornithology ever since I was a boy.

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## THE MOUNTAIN CHAT.

*Saxicola monticola.*

By Dr. A. G. BUTLER.

This interesting and neat-looking little Wheatear has received no less than eight specific names owing to the remarkable changes of plumage through which it passes: these appear to be most marked in the male bird, but if Stark and Sclater's description of the *adult* female is accurate, I should say that the statement that her plumage remains constant throughout life is not strictly correct. They observe that "Formerly each change of plumage was considered to represent a distinct species and it is in this way that the long list of synonyms quoted have (sic.) arisen."

The seven stages noted are as follows:—

Stage 1.—Birds of the year, similar to the female but somewhat darker in colour.\*

Stage 2.—Only differs from Stage 1 in that the shoulders are white, though not so conspicuously so as in the next stage.

Stage 3.—Shoulders white, the median and lesser coverts as well as the scapulars undergoing the change; abdomen commencing to get white.

Stage 4.—The head now begins to become grey; below from breast to vent white.

Stage 5.—Head grey or whitish-grey; below white (in some the head becomes white before the belly, in others *vice versa*).

Stage 6.—Grey all over; no black; shoulders greyish-white.

Stage 7.—Whitish-grey all over; shoulders white.

Messrs. Butler, Feilden and Reid, found birds in all these stages (except the first) pairing with black females and hence concluded that they represent one single species."

On March 1st Capt. Boyd R. Horsbrough wrote to me as follows:—"I am sending you a pair of *Saxicola monticola* and a

---

\* The female is described thus:—"Entire plumage brownish black except the rump and upper tail-coverts and the bases of all the tail-feathers except the two centre ones, all of which are pure white."

single *Macronyx capensis*: they go by the Durham Castle and will arrive on or about April 1st.

“Should these birds arrive all right I will send you all my notes on them for publication. I took a hen *Saxicola* home the year before last, but it died on arrival. They feed on ‘Century Food’ and mealworms, a supply of each goes with them.

“I brought the Chats up by hand from the nest: the Long-Claw was caught adult.”

Unfortunately the Long-Claw died before the ship started, but the Chats reached Southampton alive, although the food ran short the day previously; and consequently they were fed, on the last day of the voyage, upon raw meat and maggots, which (in my experience) is a very dangerous diet for young insectivorous birds.

Owing to a remarkable series of misunderstandings, the pair of Wheatears found their way to the Zoological Gardens, and it was not until the 14th that I was able to establish my claim to them, and get them into my possession. Whether the raw beef and maggot diet had been continued, I cannot of course say; but when I wished to let them out into their flight-cage, the male would not stir until I put my hand in to fetch him out; I noticed also that, although fairly active, he was unnaturally thirsty; after two or three days he seemed unable to judge distances, and when flying up to the lower perch, would sometimes strike it with his chest and fall back to the floor: on the sixth day after he reached me I found him crouching on the floor of the cage half asleep; and, in spite of nursing and remedies, he died two hours later. The hen is living and active as I write.

Now, supposing these birds to be in their first plumage, they do not answer at all well to Messrs. Stark and Sclater’s descriptions:—

The hen is *not* brownish-black or even blackish-brown, but is of a ruddy mouse-brown or smoke-brown colour, with the exception of the white characters previously noted. The cock does not resemble the hen at all, but is dark ash-grey, faintly washed with olive above; pearly ash-grey, washed with brownish on breast and flanks below, the lesser wing-coverts are white and

the median coverts edged and broadly tipped with ashy-white, the wings otherwise smoky-brown, becoming almost black on the secondaries, the tail is slaty-black, all but the central feathers largely white at base, the outermost feathers almost entirely of that colour; the rump and upper- (as well as under-) tail-coverts white.

This male, therefore, although presumably a bird of the year, seems to correspond most nearly with Stage 6, (almost *S. castor* of Blanford and Dresser's Monograph) while the female is altogether browner than Messrs. Stark and Selater describe it. The question is—How many changes, if any, did Capt. Horsbrugh observe before forwarding the birds to me? He has not, so far, sent me on his notes; and I am unable to hold back this article any longer, because I am short of copy for the Magazine.

The hen is a nice bird, but not particularly confiding; she flies rapidly backwards and forwards every morning while I am renewing her food, being evidently nervous until my hand is out of the cage; she will not take insects from my fingers, but will come to the front of the cage and call to me when she wants an insect; the sound of the call is not pretty,—a sort of "*Hrish*," sometimes repeated with variations like the commencement of a song; she also sits on a perch looking upwards and opening and shutting her wings as though she wished to take a long flight.

In Sharpe and Layard's "*Birds of South Africa*," pp. 246, 247, we read:—"Le Vaillant found this bird inhabiting the mountains of Namaqua Land, and never descending into the plains, except compelled by great drought. He describes them as very shy and difficult of approach, hiding themselves in holes or inaccessible precipices."

Le Vaillant's account of their habits is substantially correct. We only found them among the rocky mountain sides, breeding in the holes and crevices. Mr. H. Jackson writes to us:—"Among the eggs I now send are fourteen of *S. monticola*, all from the same pair of birds, our old friends of last year. This makes thirty-four of this sort, all or nearly all from one pair of birds. They build in my kraal walls, and no sooner are their eggs taken than they set to work to make a new nest in a fresh place, finish it, and lay their eggs in a very short time."

Mr. Ayres observes:—"This bird I shot in the Free State of Transvaal, but I also saw one on the banks of a small stream near the Tugela in Natal. It appears to be solitary in its habits, frequenting the steep banks of rivers, and is very shy and scarce. The stomach of the one I obtained was well filled with insects." Later he writes:—"These chats are to be found in many localities in the open country of the Transvaal, frequenting rocky situations. Their nests are generally placed in crevices within a few feet of the ground; but at some of the farmhouses they may be seen having taken possession of an unfinished Swallow's nest, under the eaves, where, if not interfered with, they become exceedingly tame. Though sombre in colour, they immediately attract the sight by frequently spreading the tail, and showing its snow-white feathers. They are also frequently to be found amongst the ant-hills which are so abundant in the Transvaal."

Messrs. Stark & Selater (*Birds of South Africa*, vol. II., pp. 195, 196) observe:—"The Mountain Chat is very common in rocky districts, and is generally to be found in the dreariest and most arid places, especially where there are hills, to which it generally retreats when disturbed; like other Chats it moves jerkily, fluttering its wings and raising and depressing its tail when it perches on a stone or bush. Its food consists of insects, which it catches either on the wing or on the ground. It has a pretty song, which, however, is not often heard. They often sit in pairs on small ant hills and have a habit, the males especially, of soaring a short distance and dropping suddenly again and then skimming on a considerable way.

Major Butler gives the following notes on its nidification: "Found a nest on September 10th, near Newcastle (in Natal) containing two fresh eggs, and the fragments of another that had been broken. It was built on the side of a hill under a slab of rock overlooking a running stream about twenty yards below, and consisted of fine dry grass, roots, etc., neatly put together and well lined with sheep's wool, horse- and cow-hair, the whole being supported by a strong embankment of short pieces of coarse stems, grass-fibres, roots, lumps of dry earth, etc., matted together and extended some eight to ten inches from the

edge of the nest to suit the slope of the ground. Eggs pale green, well-marked with chestnut-red and with a few faint purplish markings as well, chiefly at the large end where it forms a conspicuous confluent cap. The eggs measure '90 × '65."

According to Messrs. Alwin Haagner and Robert H. Ivy, the eggs are pale blue-green, sometimes plain and sometimes speckled with reddish purple (cf. *Sketches of South African Bird Life*, p. 19).

Mr. G. C. Shortridge (*Jour. S. Afr. Orn. Un.* vol. I, page 24) says:—"Frequents kopjes: very plentiful; rather wild, going about in pairs. I did not stay long enough at Hanover to determine accurately the plumage-changes of the males. I found, however, all the forms pairing with females. They undoubtedly change from black to grey, but I believe that the white shoulders and underparts are peculiar to individual birds which develop during the black stage; others never obtain this coloration, although intermediate forms with more or less white shoulders are common. The females also vary as to the amount of white on the tail-feathers."

It would seem that the last word has not yet been said respecting the changes of plumage in this Wheatear, and therefore I regret the more that the male should have died so soon after I received it. Apparently it has not been successfully imported previously.

I feed the hen upon Trower's Improved Cecto with a few breadcrumbs and a little yolk of egg, well mixed together and slightly damped; also mealworms or other insects, spiders, and, when obtainable, grapes: later I hope to try the hen with ripe red currants: but I find insectivorous birds such a tie, that I expect I shall ere long have to give them up; they have kept me at home without a day's holiday for about twenty-three years, and therefore I think I have done my duty by them.

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## THE NESTING OF THE DWARF GROUND DOVE.

*Chamæpelia griseola.*

By W. E. TESCHEMAKER.

I recently received an urgent reminder from our excellent Hon. Correspondence Secretary that a promise I made some months since to write something for the Magazine had never been fulfilled. I regret that my choice of subjects is limited, as I have had no luck with my birds since 1906. The united efforts of all the inmates of my aviaries this season have only produced four young Magpie Mannikins, one Yellow-rumped Serin, one Cirl Bunting and two Ground Doves. As the Foreign Bird Club is now trying to encourage the breeding of British species, whereas the Avicultural Society does not (officially at all events) appear to take much interest in the latter, I am sending some account of the nesting of the Cirl Bunting to the F.B.C. and I will make good the promise, previously alluded to, by saying something about my Dwarf Doves.

The latter were imported by our member Mr. E. W. Harper last summer and came into my possession in the autumn. My aviaries were so infested by cats a few years since that I found it necessary to get rid of all Doves of any species owing to their great nervousness, but by a system of wire-netting entanglements, such as was not attempted at Mafeking, I am now better able to repel the attacks of the enemy, so I have recently acquired one or two species of small Doves. Doves, however, are not favourites of mine and have never interested me. They quite lack the three characteristics which I think we admire most in birds, namely, song, beauty of plumage and vivacity.

The stupidity of the *Columbidæ* is so colossal that I have often wondered how they have survived at all in the keen struggle for existence. As a counterpoise to their stupidity, however, they have great vitality, great fecundity, long life and great power of flight. With the possible exception of the Diamond and Cape Doves hardly any I think are attractive from an artistic point of view, and the weird notes of many of the foreign doves can only be described as ludicrous. A pair of Woodpigeons nest in the elm-trees in my garden every year and

when their mellow notes ring out in the early morning they make the voices of the doves in the aviary seem absolutely insignificant. Doves however have just one advantage, namely, that they are very easy to breed (or at all events this has been the case with the few species that I have kept); hence no doubt their popularity with some of our members.

*Chamæpelis griseola* is a South American species. I have not been able to ascertain anything definite with regard to its distribution or wild life. Mr. Harper writes me as follows:—"I regret being unable to furnish any particulars beyond stating that I have often seen these Doves in small parties of two's and three's on the ground near cattle-sheds in the Botanical Gardens, Georgetown, Demerara, where they were evidently feeding upon grain. I have also observed them up the Demerara River, thirty or forty miles from the coast, feeding on the ground in the clearings at the edge of the forest. They appear to be shy birds, easily taking flight when approached."

Mr. Harper thought that this species had not been previously imported but, as a matter of fact, I myself had two of these Doves sent me by a dealer in 1904. They were described as a pair but, after I kept them over a year, it dawned upon me that they were two cocks. It is quite likely therefore that others have been imported and they may even have been bred.

In size they are a trifle smaller than Passerines, compactly built, wings and tail short. They run and fly well and are very active. *Griseolus* of course means "greyish," but I do not think this is a very accurate description of their colour. The male is a light blue, when in full colour, and has a few dark metallic spots on the wings.

The female is a dark fawn colour, inclining to brown, and has more metallic spots. Her crown is rounded in profile, whereas that of the male has an angular outline; she is also rather smaller. Both sexes have the inner surface of the wings of the usual salmon pink. The note of the female is a monosyllable, generally repeated three times, and sounds like the word "worp." The note of the male is about a third lower in pitch and may be rendered "werp." To distinguish them let us call them "Worp" and "Werpe."

I turned them out in a small division, measuring 12 feet by 6 feet by  $6\frac{1}{2}$  feet high, which I call the "tropical aviary" because, being entirely enclosed by glazed frames and having a large pipe area, it generally maintains a high temperature. Here they made themselves quite at home, dividing their time between the floor and the perches, but they would not take to any of the nesting sites provided. On the 26th December "Worp" laid an egg on one of the wire guards covering the hot-water pipes and a second on the following day, but made no attempt to incubate them. Several more clutches of eggs were laid in the same position during the winter, but there was no attempt at nest-making.

Early in April I turned them out in the Waxbills' aviary, but here we were at once confronted by a new difficulty. The outdoor flight of this aviary communicates with the warmed house by a small aperture in one of the glass frames forming the sides of the latter. Many species of small foreigners have been kept in this aviary as well as various Tanagers, Shamans and other insectivorous species and not one has ever had any difficulty in finding its way in and out after a few days. But "Worp" and "Werp" were far too stupid to comprehend the arrangement: they could find their way into the covered house but could not get out again. So once more a clutch of eggs was laid on one of the water pipes.

Again I removed them—this time to my original aviary which also has a small lean-to house, but one that not even a Dove could fail to obtain access to. Forthwith "Worp" collected a little hay and placed it in the fork of an apple tree. As I felt quite sure that her limited intelligence would not enable her to build an efficient nest, I constructed one myself and fixed it up with wire in the position they had selected, with a small wooden roof over it. I was only just in time for the very next morning the nest contained an egg. The eggs of this species vary a good deal in size; two that I have before me measure .82 by .66, being rather larger than the average. They are pure white with a smooth china-like shell.

For a few days all went well. "Werp" used to sit during the morning and his partner during the afternoon and at night.

But one morning I found the eggs on the ground and a hen Scarlet Tanager in the act of emptying them of their contents. I decided to catch up everything in the aviary, except the Doves, so as to give them a fair chance, and in a week's time "Worp" was once again sitting, and this time she had an aviary entirely to herself.

I cannot give the period of incubation, because I was many long miles from home at the time they hatched, watching the nesting operations of the Montagu Harrier, but on my return the young were well feathered. "Worp" did most of the feeding, cramming them after the time-honoured method of the Dove family—two at a time.

The young did not leave the nest for nearly three weeks by which time they could fly as well as their parents and could run like partridges. They are fawn-coloured, each feather being margined with light buff which gives them somewhat a mottled appearance. I have not so far once seen the young on the ground but, for all that, I do not think the title of "Ground-doves" is a misnomer. Their ambulatory powers are great and they have some of the distinctive habits of ground-birds, as for instance that of crouching, with beak pressed on the ground and tail elevated and directed towards the observer, which is a common habit of some of the Quails and of the Quail-Finch.

The adult pair laid again before the young were independent, but I removed the eggs fearing they might desert the young. "Worp" was furious with me when I robbed her eggs, clinging to the nest with both feet and striking viciously with her wings. I had to actually lift her from the nest before I could secure the eggs.

It is evident that this little species is very prolific, and, as I said before, absolutely easy to breed.

I am glad to have found a good home for the young pair, our member Mr. W. T. Page having expressed a wish to have them.

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## NOTES ON MY BIRDS.

By ROSIE ALDERSON.

*(Continued from page 238).*

No. 4 division of the aviary is not used as a nesting house at all, but just as a place to turn in one or two odd specimens and some of the year's young birds when they are old enough to well do for themselves. It is always useful to keep a place especially for this purpose, but apart from this, my chief reason is that not a nest is safe in this house owing to the wickedness of "Dick," my Masked Parrakeet. He will eat the eggs or even the young birds, for I once found him eating a young Picni Dove that was quite a good size. "Dick" is very peculiar with birds though quite good tempered with people; I have never known him bite anyone yet. He has already injured or killed several birds at different times, but as a rule they have been birds of his own species. Now I only keep doves in his house, and he seldom takes any notice of any of them, very rarely he has sudden outbreaks, and then I have to be on the look out for the safety of the other birds, but as a rule the offending bird can be removed before any real harm is done. "Dick" is a very engaging pet and so tame I can do what I like with him. He is very gentle and if he may sit on my shoulder or nestle under my coat he is quite happy, chirping and making strange noises to show his pleasure. If he sees me talking to another bird and can attract my attention in no other way he will *put on* a make-believe limp in one leg just to get me to notice him. He is a strange bird in his tastes, and seems to like things the reverse way on: for instance, he prefers the pips to the orange, the stalk of the grape to the fruit, and the shell of the pea to the peas themselves. I have had "Dick" now for some years and consider him the gem of my small collection. He was brought over from the Fiji Isles by a sea-captain, and was tame with me from the very first. The Masked Parrakeet is very handsome, being a large bird with a very long sweeping tail; the general colour is very bright emerald green, but the face is black (hence its name), the eyes bright orange, and the breast yellow shading into deep orange on the under parts. The long quill feathers in the wings are bright blue.

In this house is an old cock Greenwing Dove that I have had for many years—I should think nine or ten. He still looks very juvenile and in perfect feather. It would be interesting to know how long doves really live on an average if kept under good conditions. If a bird is bought adult, as the Greenwing was, of course its age cannot be determined, but there must be many cases where the age of aviary-bred birds might be noted.

A Violet or White-fronted Dove in this house is one of my favourites; her mate met with a sad end. He was a particularly fine bird and I do not think bad tempered, but one day I found him quite blinded in both eyes, they had been pecked, and I strongly suspected a Bleeding Heart as the culprit. The poor Violet only lived a few days, his sight was gone and his spirit seemed quite broken and he had no sense in finding his food. Violet Doves are never very common, but I expect another mate for my little hen before the summer is over, as I may have several birds sent me later on from Jamaica.

In No. 6 division I have shut the door between the flight and the shelter, so dividing the place into two parts, the door is of wood and wire, and there is a good sized window in the shelter so it gets plenty of light. In the flight are a pair of Aurita Doves and their young one, a pair of Cockatiels and my second Masked Parrakeet "Jack," a very old bird. I have had "Jack" a long time and have tried to make him care for me but not with much success. One minute I may pet him in safety, the next I must look out for a bite. He does not try much to bite in an ordinary way, but has a method of his own of striking out with his beak. He is a strange bird—not caring for women at all—but very fond of men, and was devoted to the groom who used to see to the aviaries, letting him pick him up and do what he liked with him without showing the least inclination to bite. Last spring the groom died, and "Jack's" distress was great; he missed him very much, and sat constantly on the watch with an expectant look that was pathetic to see. Now "Jack" has made great friends with one of the gardeners who at present has charge of the birds, and it is amusing to see how the bird will come to him (when he will go to no one else), bowing his head up and down to show his pleasure.

The cock Cockatiel is a dear little bird, that I bred some years ago. He will not come on your hand, but will take a biscuit and whisper his two sayings that he is "Tommy" and "pretty boy" in the softest voice in your ear. Strangely enough he will come as near as possible to your face, but declines your hand altogether. A few weeks ago I gave "Tommy" a mate and he was just overjoyed. It was funny to watch their first meeting, he was so nearly wild with excitement that he kept telling the bewildered hen that he was "Tommy" and "pretty boy" over and over again till she looked as if she really thought he must be out of his mind. They are now a very happy little couple for they are sitting very steadily on three perfectly white eggs. "Tommy" is so filled with pride and importance that he has rather forsaken me, his time being spent in jealously guarding the nest box or sitting on the eggs, and woe to an Aurita Dove if it comes too near. If I look inside the box he fluffs out his feathers and makes a hissing noise at me.

The Shelter in this division only contains some Barbary Doves (kept as foster parents if needed for rarer doves eggs) and my Orange Winged Amazon Parrot "Cric." His real name is "Criccieth," called after the little Welsh watering place, where I first saw him and bought him. "Cric" is a great pet. He is very fond of me, and with him I always feel it is not a case of cupboard love, for his great happiness is for me to talk to him and pet him, often refusing dainties till I have noticed him. He is very tame and comes out in the garden on my hand or shoulder without any fear of his flying away. Sunday is our happiest day when we see the most of each other, and can sit out together in the garden, but it usually ends in my not getting much reading done if "Cric" is there. He is a very gentle bird, and when he is with me insists on being noticed and will give me little kisses on my face and neck if I don't talk to him and pet him sufficiently. His look of supreme contentment when he has achieved his object is most expressive.

The other parrots I have are a pair of Senegals called "Max" and "Bridget." The former is a most intelligent bird. I taught him to pick a nut from my pocket, and he has very quaint conceited little ways, being very vain and self-important,

but neither he nor "Bridget" are *entirely* to be trusted, and even a pinch on your finger from one of them is no joke, but it is only fair to them to say they have never really bitten me. The Senegal Parrot is a very pretty little bird, being bright light emerald green, with very clear orange breast and a grey head and yellow eyes. One great drawback to Senegals is their destructiveness to woodwork. Their beaks are so strong that they will soon ruin any aviary, and even putting special blocks of soft wood for them to gnaw at will not cure them of biting where they should not.

I have just had a pair of most beautiful Barraband Parakeets very kindly given to me by a friend. I had never kept this parakeet before, and am charmed with their gentle ways and graceful shape. "Madame," the hen, is green with beautiful salmon rose under feathers in her long tail, and soft blush of pink and blue mingling with the green on her face. "Monsieur" is much more gorgeous, he is a very vivid green with bright yellow on the forehead and throat and broad band of rich scarlet running round the latter in front. Both birds are getting tamer (I have not had them a week yet) but the cock is the shyer of the two.

I have just one more little aviary and flight, but this is only occupied by several Dwarf or Ruddy Turtles and their three young ones. This very pretty little Indian Dove is not common in England, and the hen being hardly ever imported is decidedly rare. This is a tiny dove (rather smaller than a Senegal) and the colour of the cock is brick red, with a soft blue grey head and broad black collar round the back of the neck. The hen is quite distinct from the cock in colour being dun-brown with a black collar. The young ones are just the colour of the hen until some months old. I find these little doves one of the easiest of their kind to breed, though they are very shy and must, when nesting, be let severely alone.

A year or two ago there appeared to be none bred in England (though they had been bred years ago) for the hens were almost unknown, but I am gradually raising a stock of them again and hope they will be re-established. They are such beautiful little birds I think every dove lover should keep them,



and they are of a *most* peaceable nature. The little flock I have live in perfect happiness together.

I must apologise, before concluding, to the older members, that these notes may in part be what I wrote about for the Magazine years ago, but the Society has greatly changed since then, there are so many fresh members, that I hope I may be forgiven, as these are chiefly written for them and for beginners in aviculture.

If every member would keep an aviary log-book and just jot down each day any little observation on the birds, the information so obtained would be of great value to the cause of aviculture in general, and no bird-keeper who loves his birds knows, till he has tried it, how interesting it is to read his old aviary records and compare the days of the past with the record of the present.

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## NOTICES OF NEW BOOKS, ETC.

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With the June number of *British Birds* the second volume commences and the Editors are already in a position to offer an attractive programme for the months to come: articles by Messrs. Boyd Alexander, E. Bidwell, J. L. Bonhote, W. H. Kirkman, Commander H. Lynes, W. M. J. Nicoll and Prof. Lloyd Morgan being promised.

In the present number Mr. W. H. Mullens gives an account of some early British Ornithologists and their works; Messrs. Robert Newstead and T. A. Coward describe an example of Schlegel's Petrel, a new British and European bird found dead under a tree near Tarporley, Cheshire, on the 1st of April of the present year. Mr. Heatley Noble explains the means of identification of the various species of Ducks' eggs, and Messrs. Witherby and Ticehurst continue their account of the additions to our knowledge of British Birds since 1899.

Among the Notes Mr. G. M. Beresford Webb refers to a notice in last month's number respecting the shooting of a Nutcracker in Kent and states that one escaped from his aviaries three days previously. It would be interesting if we could have

a record of all escaped birds throughout the British Isles to see how many of them had assisted (presumably) in swelling the records of rare visitors to our coasts.

On page 30 is a photograph of the nest and eggs of the Short-eared Owl found breeding at Rainworth, Notts., on May 1st, and various other notes of interest complete the number.

ED. *pro tem.*

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PRELIMINARY REPORT ON AN INVESTIGATION OF THE SEASONAL CHANGES OF COLOR IN BIRDS. By C. WILLIAM BEEBE. The American Naturalist, vol. XLII., No. 493, Jan. 1906.

The experiments of Mr. Beebe are all extremely interesting, and that described in the article forwarded to us is especially so : it deals with the cause and factors which determine the seasonal change in the males of the Scarlet Tanager (of North America) and the Bobolink.

Mr. Beebe first suggests seven possible factors which may influence this change of color ; but, the experiment which he describes (and which had the remarkable result of completely eliminating the autumn moult, so that the bird, in the spring, moulted from nuptial plumage to nuptial plumage—the green winter plumage being skipped) only dealt with the “general condition of the bird’s body—whether fat or lean.”

The selected birds were not allowed to breed ; the supply of light was gradually cut off, and the amount of food increased ; as obesity in caged birds renders any excitement or sudden fright liable to cause apoplexy, the birds were kept in a room in which they were never disturbed and where there was no noise : they took little exercise and naturally became very fat, and when the time for the autumn moult arrived, not a feather was shed. The songs diminished and gradually died away ; but when a bird was gradually brought into the light for a week or two, and meal-worms were added to its diet, there was a full resumption of song.

His experiment tends to prove “that the sequence of plumage in these birds is not predestined through inheritance bringing about an unchangeable succession, in the case of the Tanager, of scarlet-green, scarlet-green, year after year, but

that it may be interrupted by certain external factors in the environmental complex."

As Mr. Beebe says :—" There is a great satisfaction in thus making even the merest beginning at threshing out these problems."

ED. *pro tem.*

THE WORLD'S BIRDS, a simple and popular classification of the Birds of the World. By FRANK FINN, B.A., F.Z.S., M.B.O.U., etc.  
HUTCHINSON & Co., Paternoster Row.

An exceedingly useful and handy little book containing a vast amount of information in a condensed form.

The families of birds are considered alphabetically because, as the author rightly says, they "are so numerous, and their relationships to each other, even if they were completely agreed upon by ornithologists, could not in any case be exhibited naturally in linear order."

Under each family Mr. Finn gives first a popular diagnosis, a general idea of size, general form, character of plumage, peculiarities of newly hatched young, account of nest, eggs, food, gait, flight, notes, disposition and habits, economic quality, suitability for life in captivity and distribution : the importance of the work as a book of reference will therefore be at once seen.

Under Passerine Birds, which Mr. Finn calls the *Passeridæ*, the various groups usually accepted by Ornithologists as distinct families are treated as subfamilies, and a few sentences are devoted to the characteristics of some of the more striking forms of each group.

Mr. Finn's book will be welcomed by all bird-lovers as of considerable educational value, and we trust that it will have a wide circulation ; it is profusely illustrated by photogravures from living and stuffed specimens, and there are some useful outline blocks in the text.

ED. *pro tem.*

## CORRESPONDENCE, NOTES, ETC.

## BEST FOOD FOR A SULPHUR-CRESTED TOUCAN.

SIR,—Am I feeding him correctly :—Banana, grapes, soaked raisins, soft food, potato and orange cut up ; all of which he eats ?

Is there any food I can use that he likes especially, to tame him well with ? He does not care for mealworms. Any information will be gratefully received.

E. WARREN VERNON.

## JAPANESE ROBINS AT LARGE.

SIR,—As I have already recorded in the pages of our Magazine, I turned out a quantity of Japanese Robins (*Leiothrix luteus*) in the early spring of 1907, most of which, after a month or two, disappeared. One pair, however, nested in the garden and reared three young ones, but after June of last year neither they or their progeny were seen again.

When the great snow fall came in April of this year, a pair of these birds, presumably the same pair that nested, put in an appearance outside my garden aviaries, and since that have been seen amongst some thick shrubs in the wood close at hand during this month (June), where by the chattering they make, they are apparently nesting.

Where have they been throughout the period of a year ? One looked for them, but there was no sign of them.

HUBERT D. ASTLEY.

## BULLFINCH LOSING FEATHERS.

SIR,—In reply to the question asked by a member concerning a cock Bullfinch losing his wing-feathers in one night, I think the bird had a fright and banged about.

Some years ago I kept a pair of young Bullfinches, which I had reared from the nest, in my bedroom, and I found that, though perfectly tame and healthy, they were rather subject to panics at night when the room was dark. They would be sleeping peaceably, when suddenly, for no reason whatever that could be discovered, they would wake and dash about the cage in an ecstasy of fright. I generally quieted them by striking a light and speaking, but I almost always found that one or both of them had knocked out their wing-feathers during the panic. Whether the alarm was caused by one bird moving in its sleep and touching the other, or whether it was pure night-mare I never could discover,

The feathers soon grew again, and as the birds became older and steadier the panics ceased and they only lost their feathers in the usual way by moulting at the proper season.

E. F. CHAWNER.

This is exactly the conclusion to which I came myself, on receipt of our correspondent's letter, and I believe I wrote to that effect.

ED. *pro. tem.*

## THE ZOOLOGICAL SOCIETY'S AUSTRALASIAN COLLECTION.

In the middle of December last Mr. D. Seth-Smith sailed for Australia on behalf of the Zoological Society, with the object of obtaining, as far as possible, a representative collection of Australasian fauna for the London Zoo. He visited all of the Australian States and secured, by exchange, purchase and presentation a large collection of Marsupials, birds and reptiles, about seven hundred head arriving safely in London.

Although it is hoped that we may read about this expedition in our Magazine later on, the following list of the birds brought home may be of interest to our members:—

Banksian Black Cockatoos, King Parrakeets, Crimson-wings, Yellow-collared, Brown's, Redrump, Barnard's, Mealy Rosella, Rosella, Stanley, Blue-bonnet, Rock Peplar, Yellow-bellied, Bourke's, Pileated and Queen Alexandra Parrakeets; Swainson's and Yellow-collared Lorikeets; Kea Parrots, Emus, Cassowary, Black Swans; Cape Barren, Maned and Magpie Geese; Raja and Variegated Sheldrakes; Australian Shovellers, Eyton's Tree Ducks, Whistling Ducks, Black Ducks, Chestnut-breasted and Japanese Teal; *Apteryx*, Weka Rails, Australian Pelicans, Native Companion Cranes, Ibises, Stone Plovers, Wattled Plovers, Black-breasted Plovers, Black Water Hens and Green Water Hens (*Tribonyx mortieri*) and Blue Porphyrios; Bustards, Wedge-tailed Eagles, White-bellied Sea Eagle, White Goshawks, Brown Harrier, Australian Sparrow-hawk, Black-cheeked Kestrel, Australian Kestrel, Winking Owls, Boobook Owls, Frogmouths; Laughing, Leach's, Pawn-breasted and Sacred Kingfishers; Wonga Pigeons, Bronze-wing and Brush Bronze-wing Pigeons; Satin and Spotted Bower-birds, Pied Grallinas, Coach-whip-bird, Blue Wrens, Hemipodes, Quails, Brush Turkeys; White-backed, Black-backed and Black "Magpies"; Butcher Bird; White-fronted Herons, Melodious Thrush, Oriole, Cuckoo Shrike; Garrulous, Blue-faced, Spiny-cheeked, New Holland, White-tufted, Spine-billed and other Honey-eaters; Black and White Fantails, Fire-tailed and other small Finches.

Many of the birds are housed near the Marsupials on the North bank of the Regent's Canal, but there is not sufficient accommodation there for nearly all, and the majority have been distributed in various aviaries, houses and paddocks in the Gardens.

## A BIRD'S VENGEANCE.

On the 30th of October, 1907, Mr. W. E. Teschemaker sent me a pair of Chingolo Song-Sparrows which he had bred and I turned them into one of my smaller aviaries in company with a good-tempered Long-tailed Whydah (*Chera progne*).

Soon after the Whydah had resumed its summer dress, about May, 1908, the Song-Sparrow determined to go to nest in a covered box (cigar-

box pattern) hanging high up in the aviary. After partly filling the box with hay, feathers and wadding, it suddenly seems to have struck them that the Whydah's longest tail-feathers could be coiled round so as to form an admirable lining to the cup; they therefore watched their opportunity and stealing up close to the Whydah suddenly tweaked out one of these feathers and flew triumphantly off with it.

From time to time this trick was repeated, much to the annoyance of the Whydah, which crouched down and made grimaces at the Chingolos whenever they approached him: eventually only one of the longest feathers remained, and the hen Chingolo coveted it to her hurt; she appears to have snapped at it about two inches from its extremity, just giving the Whydah room to turn suddenly upon her. On the morning of June 21st I found her dead upon the floor, every feather plucked from her back and one side of her face, the inner secondaries torn out and all the flight- and tail-feathers broken off short. The place where the Whydah's tail-feather was seized is clearly visible, the feather being bent abruptly at the spot. A.G.B.

## POST MORTEM EXAMINATIONS.

Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr ARTHUR GILL, Lanherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, *and a fee of 1/- for each bird*. If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons and Canaries can only be reported on by post.

GOULDIAN FINCH. (Mr. G. Carrick). Septic enteritis was cause of death.

BRUSH BRONZEWING DOVE. (Miss R. Alderson). The bird died of collapse brought on by dysentery.

SCARLET TANAGER. (Mr. Hoyte). This bird died of apoplexy. No doubt rigor mortis had set in but passed off.

*Answered by post:*

Mr. J. Lewis Bonhote.

Rev. H. D. Astley.

Mr. H. Robbins.

ARTHUR GILL, M.R.C.V.S.

### III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

#### NEW MEMBERS.

Mr. HANLEY; Lloyd's, London.

Mrs. DAWSON; 14, Bryanston Square, W.

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#### CANDIDATES FOR ELECTION.

Mr. WILFRED FROST; 103, Goldhawk Road, Shepherds Bush.

*Proposed by Mr. FRANK F. ANDREWS.*

Mr. WILLIAM JOHN BANKS; Restdown Hall, Alfred Street, Canterbury, Sydney, N.S.W.

The Rev. FATHER MCGEE; Bathurst, N.S.W.

Mr. S. LE SOUËF; Zoological Gardens, Moore Park, Sydney, N.S.W.

Mr. ALEX. BORTHWICK; Vereena, Canonbury Grove, Dulwich Hill, Sydney, N.S.W.

Mr. A. W. MILLIGAN; c/o Messrs. Parker and Parker, Perth, Western Australia.

*Proposed by The Hon. Editor.*

Mr. R. STAPLES BROWNE; Bampton, Oxon.

*Proposed by Mr. J. I. BONHOTE.*

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#### MEMBERS' SALE AND EXCHANGE COLUMN.

*The charge for private advertisements is SIXPENCE FOR EIGHTEEN WORDS OR LESS, and one penny for every additional three words or less. Advertisements must reach the EDITOR on or before the 26th of the month. The Council reserve the right of refusing any advertisement they may consider undesirable.*

To be sold on account of letting house:—15 various Waxbills 7/6 pair, or offers for lot; pair Pintailed Nonpareils 30/-; 1 hen Marsh bird 30/-; pair Crown Tanagers 25/-; 1 Red-cheeked cock Bulbul 15/-; pair Pekin Robins 20/-; all acclimatised, having wintered in outdoor aviary. Offers entertained.

Mrs. WARREN VERNON, Toddington Manor, Beds.

Fine cock Diamond Finch 8/6; pair Double-banded Finches 15/-; cock Golden-breasted Waxbill 2/6; all acclimatised, outdoor aviary.

FRANK BATHE; 5, Montgomery Road, Sheffield.

Tame Tui Parrakeet, perfect pet, with me over four years, 40/-.

CHARLES ISAAC, Somerton. Slough.

Bronze-winged Doves 30/- per pair, cock bird 15/-; Senegal Doves 15/- per pair, hen bird 7/-.

Miss CRESWELL, Morney Cross, Hereford.

Rare Ground Doves, pair, 30/-; cock Cassique 15/-.

WANTED—Cock Cape Canary, cock Quail Finch.

TESCHMAKER, Ringmore, Teignmouth.

*(Continued on opposite page).*

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## THE JOURNAL OF THE AVICULTURAL SOCIETY.

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(Continued on page iii. of cover).





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WHITE-BELLIED AMETHYST STARLING.

*Pholidauges leucogaster.*

# Avicultural Magazine,

BEING THE JOURNAL OF THE

AVICULTURAL SOCIETY.

New Series—VOL. VI.—No. 10.—All rights reserved.

AUGUST, 1908.

## THE WHITE-BELLIED AMETHYST STARLING.

By Dr. HOPKINSON, D.S.O.

The Amethyst Starling (*Pholidauges leucogaster*) is certainly one of the loveliest of the smaller Gambian birds which I know or have seen during my six years service in that part of West Africa. It is, however, but rarely imported into Europe,—so rarely that a male I brought home to the Zoo in 1906 was the first specimen that they had ever had there, and, as far as I could ascertain, the first to reach England alive. It is a pity from our point of view that this is so, as judging from my experience with the two males, which I have kept as cage-birds since I have been in the Gambia, they are long lived and easily catered for in captivity, while the male's beautiful plumage—a metallic royal purple set off by the purest white—must excite the admiration of all and would ensure high honours on the show bench.

The plumage of the male is as follows: Whole upper surface including the wing-coverts, together with the sides of the face, throat, and upper chest, royal purple with metallic reflections, bluish or reddish according to the light or its angle of incidence; this varying sheen, under certain lights, often gives the appearance of a glowing ember, so that the bird looks red, although no sign of such colour is visible under ordinary illumination. The rest of the under surface is pure white with a pale greyish tinge towards the sides. The lores, chin, a line through the eye and the primary quills are black; the edge of the wing white, its under surface blackish grey; tail feathers blackish with a purple gloss above, except the two centre ones, which are entirely purple; below they are a very dark grey.

Some males have brown edges to nearly all the purple feathers; this one finds chiefly in birds shot during the dry season. These may be young birds, or, on the other hand, there may be an annual change of plumage, the full breeding dress being only attained in the rains (the nesting season) by the loss of these brown edges. Both my birds were caught just before the commencement of the rains, and neither of them had a sign of brown edging. The female is very different from the male; above brown, mottled, most of the feathers having lighted edges; wings and tail darker; below she is whitish with an indistinct rufous band across the chest. The young in their first year resemble the female. The irides are bright yellow in the male, a paler yellow in the female. Length about  $6\frac{1}{2}$  inches, that is rather larger than a Nightingale. Bill and feet black in both sexes.

The range of the species extends throughout West Africa; in the Gambia they are not uncommon, chiefly within about 50 miles of the coast, where the country is largely forest or covered with thicker "bush" than further inland. A few are resident all the year round, but their numbers are much increased in May by a large influx from other parts, especially from the southward, mostly paired by the time of their arrival and evidently coming to breed with us during the rains, though I have never yet had the luck to find any nest. I expect, however, that they breed in holes in the larger trees, for when travelling in the forests at this season or in the two following months one meets with about equal numbers of these Starlings and Golden Orioles (*O. auratus*) flying about the higher branches of the African Mahoganies and other similar trees. The Orioles are common in the Gambia all the year round, but increase in numbers before the rains and mostly move to the thicker "bush" or forest country for the breeding season, nesting in the higher branches of such trees. Near Bathurst, the chief town and headquarters of the Gambia, situated on a swamp-bordered sandy island at the mouth of the river, the Amethyst Starlings are not uncommon in the thickets which border the causeway running to the mainland through the swamp which extends behind the sand-barrier of the seashore. They are generally seen in pairs, the male usually leaving cover first, to be followed a few moments later by his plainly attired

mate, and when the light of the setting sun happens to fall on the male as he flies by, the play on colours is wonderful,—at one moment the upper parts and breast may be a deep ruby-red, flame-like in its intensity; at the next, as the incidence of the rays alters, the normal magnificent purple, to be followed perhaps by another flash of fiery red or by an eclipse-like change to dull blackish as the bird drops into the shade of some bush.

Their food consists of various berries and bush-fruits, especially those of the "Soto" tree, a kind of wild fig, which is very plentiful in this country; one of these, when its fruit is ripe, is always alive with different species of fruit- or nectar-eating birds and among the crowd (at any rate from May to October) a pair of Amethyst Starlings will probably be found. They also eat a good many insects, especially, I think, those kinds attracted to over-ripe or rotting fruit, but at times one sees them hunting for ants or other creeping things on the ground or, more occasionally, catching insects in the air, particularly the flying ants as they leave the earth on their first and only nuptial flight during the early rains.

In captivity this Starling makes a delightful pet, his lovely plumage, which he keeps in spotless condition, being by no means his only attraction, for he soon becomes tame, has a fair share of the usual Starling intelligence, and although he is no great singer, his notes, a series of soft fluty whistles, are pleasing to the ear and very different from the harsh screams and cries of his relations the Glossy Starlings. Besides, as I said above, he is not at all difficult to cater for; my two birds lived for the first month after capture almost entirely on live "Bugabug" or white ants, the insect food (fortunately for birds, but unfortunately for the owners of stores and boxes) so easily obtainable in West Africa. Later on I got out a supply of one of the advertised mixed "Insect-foods," and on this and soaked dog-biscuit the one which I succeeded in bringing home did well for the three months he was in my possession.

Eventually he reached the Zoo., fit and well in spite of all the travelling he had done by land and sea, and there he still flourishes, eating chiefly the soft-food mixture used there, but occasionally taking a peck or two at a piece of banana or orange.

With me he hardly ever touched any fruit, in fact he seemed quite content with the very uninteresting looking food-mixture, his only preference being for the ants' eggs, which he always picked out first, but when they were finished he always cleared up every scrap of the meal or the biscuit which formed the basis of his food. He delighted in his bath, taking one whenever he got the chance, and very soon became tame enough to take an insect from the fingers, if it was one he liked; but his tastes in this line were distinctly delicate, as he would have nothing to say to a grasshopper or other hard-skinned beast, but approved of anything small, soft and squashy; cockroaches, even babies, the only sea-luxury available for bird-passengers, he would not even look at, although he was all the time on rather short rations, so that on board ship his diet was of the simplest, but simple as it was it evidently agreed with him, as he arrived in perfect health and practically perfect condition.

In Senegal and other parts of French West Africa the native skin-hunters shoot a good many males for their skins, for which they ask about a franc apiece, but I have never seen or heard of one being caught alive by the professional native netters, even by those who catch the ordinary Glossy Starlings. My birds were both caught quite accidentally and unexpectedly by small boys who had set a few nooses for Weaver birds or doves in the bush just outside their village. The birds' irregular wanderings and comparatively solitary habits are their safeguard, as the native catcher generally sets his nets at water, or at any rate at a place where he can catch numbers at a time; he has no use for birds which can only be caught "one-one," as the expressive language of the Coast has it. From *Pholidauges* point of view may this long continue, though I must confess to hoping that sooner or later I may have one or two more of the beauties to bring home.

---



## THE WHITE-BELLIED AMETHYST STARLING.

*Pholidauges leucogaster.*

By Dr. A. G. BUTLER.

This beautiful bird was imported by Dr. E. Hopkinson, who presented the male from which our illustration is taken to the London Zoological Society in 1906. Dr. Sharpe places the species in the genus *Pholidauges*, and, as it is the rule of our Society to follow the nomenclature of the "Catalogue of Birds," that name is retained here; but *Cinnyricinclus*, adopted by Captain Shelley, appears to have priority.

As an aberrant Glossy Starling it might be supposed that this bird would fall into Oates' family *Eulabetidæ*; he places *Calornis* (a group of birds building pensile nests like many of the *Icteridæ*) in that family: Shelley however places *Sturnus* between the Glossy Starlings and the typical Grackles, and I am satisfied that he is right in doing so.

Oates' family *Eulabetidæ* is based upon a single character—the presence of rictal bristles; if, however, we restrict it to the genus *Eulabes* (*Mainatus* of Shelley's "Birds of Africa") we have a far better defined family. It is true that both *Eulabes*, *Calornis*, *Pholidauges*, *Lamprocolius* and some species of *Lamprotornis* and *Spreo* lay spotted eggs, but there is vast dissimilarity in the character of the nests of the different Glossy Starlings just as there is among those of the *Icteridæ*, some building pensile nests, others structures akin to those of the *Corvidæ*, while others again build in holes, and Fischer's Starling seems to build like a Weaver bird: then again there are exceptions as regards the spotting of the eggs (*Lamprotornis purpureopterus*).

To my mind the great width and remarkable sexual difference of the bill in *Eulabes*, the *Corvine* aspect of the various species, and their generally more clumsy build, sufficiently distinguish them from the *Sturnidæ*. In the character of the bill there is a distinct suggestion of *Ptilonorhynchus*, only both maxilla and mandible are less concealed under short stiff feathers. I therefore do not agree with Professor Ridgway in ignoring Mr. Oates' family altogether, but would restrict it to *Eulabes*.

The character of eggs, whether spotted or unspotted,

although constant in certain families, is very inconstant in others; not only is it inconstant in the same family, but in the same genus, species, and even in the same clutch, and in the various families of Starlings (which link the two large Finch-families to the Crows) inconstancy may well be expected.

According to Captain Shelley *Pholidanges leucogaster* inhabits Tropical Africa from 17° N. lat. to Gaboon, on the west, and to the Equator in Central and Eastern Africa; he tells us that, "in Liberia, Mr. Büttikofer met with it most frequently in the open country, the females and young birds perching together on the bushes while the full-plumage males kept by themselves at some little distance."

The female differs greatly in colouring from the male; being brown, with pale margins to the feathers; the inner webs of the flights mostly suffused with pale cinnamon; the cheeks white, streaked with brown; the under surface white, slightly sandy on the throat, at the back of which and on the breast are dark brown triangular spots, becoming rounder towards the back of the breast and at the sides of the vent, and longer at the sides of the abdomen which are brownish; under wing-coverts and axillaries brown with rufescent edges and the flights below rufescent on inner webs.

Shelley says (Birds of Africa, vol. V., pp. 39, 40); "During my visit to the Gold Coast I met with the species on a few occasions in February, between Accra and Abokobi, always in fairly large flocks of about a score." Ussher writes: "This bird is widely distributed over the whole of the Guinea Coast, and is of very general occurrence on the Gold Coast. It is usually observed in pairs, and occasionally in some numbers. I have seen the low bushes in the vicinity of the town of Lagos (on the Slave Coast) tenanted by them in large quantities, the brilliant plumage of the male contrasting markedly with the sober colouring of the female and the pied tints of the immature birds. They were feeding eagerly on the berries of a description of 'wait-a-bit' thorn, very abundant in some localities of the Guinea Coast. The male in full plumage, seen flying low in the bright sunlight, is undoubtedly one of the most exquisite birds in Africa, and a marked difference of colour is observable among even full-

plumaged males, some having coppery or golden reflections on the rich puce colour of the feathers, whilst others decidedly incline to a deep violet blue of equal beauty. Their habits appear to be similar to the Shining Grackles' in general, and did not present anything noteworthy to my observation."

"Mr. Hartert met with the species at Loko, on the Niger, in May and July, feeding on fruit." "On the eastern side of the continent, the most southern range known for the species is Nandi"; here Mr. Jackson met with a flock of five or six, "attracted by the small fruit of a large tree in the garden."

Lord Lovat writes: "Met with only in the valley of the Blue Nile and its tributaries. I once observed this Starling hawking for flies like a Bee-eater."

"Heuglin found them in the lowlands of Semien, along the Mareb and Takase Rivers, and in Bergemeder up to 9,000 feet. In May and June they were abundant on the low ground of the Samhar coast, at the Anseba and in Bogosland in families of young and old birds. Early in summer he found them assembled in large flocks, consisting of both old and young birds in the thick forests between the Gazelle and Kosanga Rivers."

Although the above account gives us very little information respecting the wild life of this beautiful Starling, there can be no doubt that it would differ very little indeed from the closely related *P. verreauxi* of which we read "Small fruits form their principal diet, although they sometimes feed on flies and the winged females of the white ant, rising and taking them on the wing similarly to Flycatchers."

Stark and Sclater observe of *P. verreauxi* (which they regard as merely a subspecies of *P. leucogaster*) Birds of South Africa, vol. I., pp. 46, 47:—"These beautiful Starlings although not so common as some of the other Glossy Starlings in Natal, are by no means rare in Autumn and Winter. At this season they are almost invariably in flocks, consisting entirely of either male or female birds. Towards Spring they appear to migrate northwards, sometimes after they have paired.

During their stay in Natal they feed chiefly on berries and small fruit, but also on insects, and particularly upon the flying termites which they take on the wing, darting upon them from

the top of some convenient bush or other advantageous station. In the Transvaal many of these birds are resident, particularly in the Rustenberg district, where they breed; at the same time the majority appear to migrate towards Spring. When migrating or moving for any distance, they fly in flocks and usually at a considerable height.

Anderson remarks that in Damara Land this species is migratory "arriving at the approach of the rainy season, and gradually leaving as the country dries up, though I have observed a few individuals remaining long after the general emigration was over, and these may probably stay throughout the year. The exquisitely coloured males arrive first, and, as far as I have observed, associate but little with the sombre females, from which they differ so marvellously in appearance."

"Like the other Glossy Starlings, this species builds its nest in the holes of trees, in the Transvaal in December, lining some natural hollow, or the old nest-hole of a Barbet, with wool and feathers, over which they (sic.) place green leaves, which are renewed from time to time. The eggs, usually four in number, are pale blue, sparingly spotted with pale brown at the large end. They measure  $0.9 \times 0.70$ ." According to Guy A. K. Marshall the cries of this bird are somewhat harsh, but the male frequently utters a very sweet, plaintive whistle. Jackson describes the nest and eggs as follows:—"Nest found in hole of hollow stump, five feet from the ground, composed of fine green leaves, small, like those of privet. Two eggs, pale greenish blue, with reddish brown speckles."

Owing to the generally high price and noisy habits of the Glossy Starlings I have never possessed one of them, although their great beauty has often tempted me. They should be quite easy to breed in a large outdoor aviary provided that one could secure both sexes; but unhappily the females of many species are rarely imported or not at all. In a natural classification I should judge that the Glossy Starlings, with *Calornis* at their head, should certainly come immediately after the Icterine Starlings and at the opposite extremity of the family from the true Mynahs—*Acridotheres* and allies, which should precede the *Eulabelidæ*; after the latter the *Ptilonorhynchidæ* and *Paradisidæ*

would naturally follow and then the *Corvidæ*. Of course all linear classification must be more or less unnatural, so the systematist has to do his best, and place perplexing forms as near to their apparent allies as possible.

---

## SOME BEAUTIFUL INSECTIVOROUS BIRDS FROM THE HIMALAYAS.

By HUBERT D. ASTLEY, M.A., F.Z.S.

In May of this year, Captain Perreau brought me some interesting and rarely imported birds, which he had caught in India amongst the hills.

I.—THE BLUE-HEADED ROCK THRUSH (*Petrocincla cindlorhyncha*) may perhaps head the list as the brightest in colouring. Smaller than the European Rock Thrush (*P. saxatilis*) he is also more brilliant.

The top of the head, occiput, throat and shoulders, are a beautiful lazuline blue; the cheeks and back, black; the wings blackish with a broad white patch across the secondaries. The tail black, with a bloom of the same blue as on the head; the breast and the whole of the underparts, the rump and tail-coverts, are full bright rufous: the beak is black, the legs brown.

When the bird is facing one, his colouring is not unlike that of an English Kingfisher.

My bird is timid in his cage, and yet he will readily take a mealworm from my fingers, even when I put my whole hand in; and when let loose in the bird room he is fairly bold.

Once I heard him utter a few notes, the part of his song, sounding somewhat like those of a European Rock Thrush.

One day he escaped and was not to be seen for eight hours, when quite by chance, whilst walking in the garden, I spied him amongst some Rhododendron bushes. Fortunately his powers of flight were not great, as his feathers were considerably worn after his long voyage from India; and it was not long before, and with the help of a mealworm, I decoyed him into his cage, which he seemed pleased once more to occupy.

He had evidently been searching for food, for his bill was

encrusted with earth : but it looked as if he had been unsuccessful by his puffy appearance and his appetite for supper ! It is curious that a wild-caught bird should be so helpless.

This Blue-headed Rock Thrush must not be confused with the other Rock Thrush, which is found in the same part of the world, and which is considerably larger : the male being mostly blue on the upper parts, with a chestnut breast and lower parts.

This one is *Petrocincla erythrogaster*. I am not sure that he is styled *Petrocincla* by those who love many names and divisions of families. Gould calls him a "*Turdus*." He is also a bird much to be desired.

\* \* \*

## II. Then there is the lovely little BLUE BUSH CHAT.

Picture a glorified Wheatear. He is smaller than that bird. His upper parts are a rich blue-grey ; a black stripe runs through his eye with a white eyebrow, and his underparts are bright chestnut. A very graceful little bird, which flirts and jerks his tail up and down, and by this, tells you a great deal of what he is thinking about.

Unlike the Wheatear, he keeps amongst thick shrubs ; and is, I should think, difficult to catch sight of. He too will take a mealworm from the fingers ; indeed, for that matter, so will all the birds about which I am discoursing.

There is something very fascinating about all the members of the Chat tribe, and they are extremely intelligent.

\* \* \*

## III. The PLUMBEOUS REDSTART. (*Ryacornis fuliginosus*).

There is one to be seen (also brought over by Capt. Perreau) in the Bird House, at the Zoo, in Regent's Park.

He is not unlike the European Black Redstart. Except for his tail, which is chestnut, he is wholly of a rich deep grey-blue, and the said tail is fanned out and jerked in a pretty way, not rapidly like an English Redstart's, but very knowingly.

When out of his cage, he will get under a table, and in obscure corners, and there he will sing [sotto voce] a sweet warble. I suppose one may speak of singing a warble, as much as of singing a song ! A little rascal as to returning to his cage, dodging in to pick up the tempting mealworm, and out again in a flash !

IV. BLUE-HEADED ROBIN (*Phœnicura cœruleocephala*).  
“Grey-headed” would be a more appropriate description, for grey it is, and not at all blue, as one understands blue.

A fine French grey! there is no getting over *that*! so that “*Cœruleocephala*” is a misnomer. Well! this grey occupies the whole of the top of the head, except that the black of the throat and breast extends narrowly up and round above the nostrils. The back and tail are also black. The wings, dark brown, with a broad patch of white on the scapulars and part of the secondaries; the abdomen whitish, the bill and feet, black.

All this means that one sees a little bird, the shape, size, and style of our Robin, looking at first sight, rather like a Pied Flycatcher with a grey cap on.

His wife is brown with a tail inclining to chestnut, and she somewhat resembles a Spotted Flycatcher, when not examined too closely.

Gould says that the Grey-headed Robin has a tendency to unite itself to the genus *Saxicola*.

It's call-note is very Robin-like. I have a pair, and they are confiding birds, and *very* pretty. The male bird met with an unfortunate accident on his way to me. His left thigh was badly broken, and when he was taken out of his travelling cage, his poor leg hung loose and helpless behind him. I bound it up to his breast with a very fine tape, putting it twice round his body under the wings, and although he managed to loosen it, so that things looked worse than before, I persevered, with the happy result that the fracture mended completely, and in three weeks the leg was as sound as the other one. Before it mended, the poor little bird hopped about gallantly on one foot, and was an extremely good patient.

\* \* \*

V. HIMALAYAN RUBY-THROATED WARBLER (*Calliope pectoralis*) [Gould].

Last, but not least by any means in point of beauty.

He is the only one that is out in an aviary, and seems to be doing well, constantly singing his melodious song, which somewhat resembles that of the Blue-throated Warbler, to whom of course he is closely allied.

And when he warbles; his brilliant ruby, just under his bill, glistens and expands, and shines out brightly against the rest of his colouring, which is grey and black and white.

Long in the shanks, he runs in Wagtail fashion on the ground, flirting his tail up and down.

Whilst singing he spreads his black and white tail out in fan fashion. One always knows when he is going to sing, or it seems to me that the tail is spread a moment before the notes are uttered.

Although the beautiful spot of ruby-red does not extend as far down the throat, as in the case of the Siberian Ruby-throated Warbler, yet the latter bird is not so pretty as it's Himalayan cousin, for the Siberian bird is for the most part of a brown hue above, not that he is not extremely pretty, whilst the one from India has a fine black gorget extending over the breast around the ruby, the upper parts are soft dark grey, the abdomen white, and the tail feathers black with white bases and large white spots at the termination of each one. A dull white line runs round and above the nostrils in the form of eyebrows over the eyes.

All this applies to the male bird; the female is principally brown; but she has the whitish eyebrows, and whity-brown terminations to the tail-feathers.

Dr. Jerdon states that the White-tailed Ruby-Throat is found throughout the Himalayas, from Cashmere to Sikkim. "I saw it," he says, "at Darjeeling, where it is not common, frequenting thick brushwood, and coming to the road to feed on insects. Adams found it at high elevations, among rocks and precipices in the N.W. Himalayas."

The range of the species goes as far as Turkestan, Assam, and also to the Eastward in Moupin.

These birds nest up to an elevation of 12,000 feet at least, in crevices of rocks.

The nest is a warm saucer-shaped pad of *very* fine moss and fern-roots closely felted together. The eggs are a uniform pale salmon buff. So says Mr. Hume in his book "Nests and Eggs of Indian Birds."

Each of these birds that I have written about would by



itself make a charming pet, and there is always a drawback in possessing too many, for one is unable to make the most of their individual charms, or to devote time to taming them, were they fewer.

A pair of Himalayan Ruby-Throated Warblers in an aviary by themselves, in which large boulders were naturally piled up, with ferns and rock-loving plants amongst them would be as pretty a sight as you could well have, and prettier still would it be if these charming little birds were to build amongst the stones and rear their spotted brood.

One would want a tiny stream trickling amongst the boulders to form a shallow pool below, where dainty feet would trip, and daintier plumage be refreshed by falling drops.

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## THE KEA PARROT OF NEW ZEALAND.

### SOME NOTES ON TRAPPING.

By EDGAR F. STEAD.

[From *The Weekly Press*, Christchurch, N.Z., Feb. 26th, 1908.]

Having for four years tried to get some photographs of keas, and also some live birds and eggs, I readily accepted an invitation to visit Glenthorn, the last station back up the Wilberforce, where from past experience, I knew that I should receive every kindness and assistance. There are, moreover, at Glenthorn several keas, more or less tame, kept as call birds, and these would be invaluable. From behind the homestead, a steep broken range runs away up the Wilberforce, broken every mile or so by deep gullies, partly bush clad, and partly bare rock and shingle. In one of these ravines, appropriately named the Jagged Spur Gully, I had years ago seen several keas, and it was there that I decided to go on my latest trip.

Saturday morning, January 11th, therefore, found me in the train for Glentunnel, whence I was driven to Mr. Phillips's station, The Point. There I met a friend, H., and, in company with him left The Point on Tuesday for Lake Coleridge, Mr. Phillips kindly lending us a buggy and a nice tame horse for the journey up to Glenthorn and back.

At Lake Coleridge we were hospitably received, and, staying there over Wednesday, we left on Thursday afternoon for Glenthorn, eighteen miles further on. Reaching the Harper river we found the crossing extremely rough, all the ford having been washed away, so we decided to leave the buggy on this side and pack our swag the remaining three miles. On Friday we were very busy making traps and cages to carry our call birds. About midday the musterers came in, our host among them, and we learned that they were going up the Wilberforce on Sunday to camp at a gully about two miles past the Jagged Spur, so we made arrangements to have our swag dropped en route. On Saturday afternoon H. and I started off up a spur behind the homestead with a call bird and three traps, which we set in a shingle slip. Our traps were cages of wire netting shaped like a pudding-bowl, and we simply propped them up with a "figure four," which we baited with a piece of meat. The call bird we placed near the traps, so as to attract the wild keas from a distance.

#### THE CALL BIRD.

Before breakfast on Sunday we climbed to our traps, but no keas had been there, so we gathered things together and went back to the house. The call bird, which had never been in a small cage before, and was very wild when we first put her in the evening before, had got quite used to her surroundings, and had learned how to hang on with her feet and beak, so that she was not knocked about when being carried. It is marvellous how quickly a kea will adapt itself to circumstances. This particular bird, after I had carried her on my back for five or six hours, got so accustomed to the motion that she would call softly to herself, or eat snowberries out of my hand as we went along. If the climbing was rough, and the cage temporarily upside down, she would brace herself with feet and beak, and quietly wait until she was righted. So quiet indeed did she become, and so docile, that we called her Angela.

On Sunday afternoon, having got all our goods and chattels together—camera, gun, cages, tramps, tent, provisions, etc.,—we started off up the Wilberforce on our eight miles walk to the Jagged Spur Gully. We had put a partition in

Angela's cage, and another bird in, and I carried them, as the day was sorching hot and the pack-horse would have jolted them too much. On arrival at our destination, we climbed up the hillside above our camp to set our traps.

#### WILD COUNTRY.

The Jagged Spur Gully is a deep-forked ravine, with steep rocky sides. The western side of the main gully is quite inaccessible, being almost sheer rock, with birch and totara growing in the crevices. The eastern side is covered with bush to a height of about 500 feet, and is then broken rock all up to the top. The side gully is bare, inaccessible rock, towering to the ridge, 7,000 feet up. We chose a rocky promontory with a stunted birch on the end of it for our traps, as it commanded a fine view of the gully, and could be seen from camp. Here we set our traps, and, it being already dusk, returned to camp for the night. One of the call birds we kept in a wire-netting run near the tent, and also in sight of the bird up by the traps. The advantage of this was that, if our distant bird saw any others early in the morning, and began calling, the bird at camp would answer, and wake us up.

#### NOT TO BE CAUGHT.

At about half-past four next morning our ornithological alarm went off, and I got up, and hurried up the mountain side. When half-way up to the traps I heard a wild kea screaming behind me, and looking round, saw him sailing over to me from across the gully. Almost immediately two others further up answered, and all three presently arrived at the traps. They were a pair and an odd male bird, and I sat quietly among the tussock a few yards away, waiting for them to rush joyfully into the traps after the meat. But not a bit of it! After thoroughly inspecting Angela and her cage, and bestowing a casual glance at the traps they came over and subjected me to a searching scrutiny. Finding I was an object of interest to them, I moved nearer to the traps, and tried in vain to call their attention to the dainty viands displayed therein. It was no use. If I sat quite still they went over and had a chat with Angela, sitting on the roof of her cage the while; if I moved they hopped

blithely around me, learning everything they could about me and my ways. The place they didn't hop on was the space covered by the traps. As they came, quite fearlessly, to within a few feet of me, I decided to try to snare them, so I went into a little clump of bush near by to get a rod and a piece of fine creeper for a noose. The keas accompanied me, hopping round in the trees above my head while I cut the stick and prepared my snare. Having got everything ready, I returned to the promontory, and squatted quietly down under a big boulder. Almost instantly a head appeared over the edge above me, and the owner of it gave a quiet little call. Another head appeared, and another, and then, within three feet of me, the birds sat and watched me, a whole world of curiosity in their bright little eyes. Gently I raised the snare and brought it towards the middle one. He took no notice until it was almost over his head, and then he quietly took it in his beak and began chewing it. Realising that I could not snare them, I went half-way down the hill and called to H. to bring up a coil of wire netting that we had. This we used to make a little run, at the entrance of which we placed Angela in her cage, hoping that we could drive the wild birds into it, but half an hour's vain endeavour convinced us of the futility of this scheme. Then I decided that I would return to camp for a camera, so that I could photograph the birds, even though unable to trap them. I descended via a single slide, and the noise of the stones rattling down with me attracted the birds, which accompanied me down to camp, and when I got back with the camera, only one had returned. The sun had by this time risen over the mountain behind us, and the day was bright and hot. Everything was propitious for good pictures, but before I had the camera ready the bird flew, screaming up the gully. Very disappointed and hot we returned to camp.

That evening at four o'clock we again climbed to the traps. Shortly after our arrival we saw a bird, and I called it down, when it proved to be the unattached male of the morning, readily distinguished by the state of his moult. We set a trap out on a ledge of rock, evening up the surface with small stones. The bird came down, and, taking the stones one by one, dropped them over the edge. Next, standing well outside the trap, he

began chewing one of the sticks, with the result that the cage fell down. It was very laughable, but it scared the kea, and he flew away, nor did we see him again.

#### TRAPPED AT LAST.

Next morning, at five, I was again at the traps, and the pair of birds returned. They hopped round as before, and presently, taking no notice of me, they began billing and cooing on a rock, very much after the style of tame pigeons. Then the female flew on to the top of a dead totara stump, and the male settled just below her, and held up his head while she scratched it with her bill. If she stopped, he bit her foot, whereupon she would go on again. At last the male bird, quite unable to resist the temptation of a large piece of bread with some raspberry stains on it, went into the trap. While I was taking him out, his mate sat on top of a neighbouring birch tree, and screamed with extraordinary vehemence. Within ten minutes she also went into the trap. I rushed up and grabbed her, though in the light of after events, it appeared to be quite a needless proceeding, as she did all the grabbing that was necessary—she worked overtime on the job, too, it seemed to me.

Later on H. came up, and we decided to shift our traps to a point further up the gully, so we returned to camp, had a breakfast and lunch in one, and started off up the creek. We found that the point we wished to reach was quite inaccessible so we went on climbing, until, at 8 p.m., we got on to a ridge several thousand feet above our camp, having caught a young male kea on the way up. We reached camp at about a quarter to ten, and, too tired to cook any food, ate bread and sugar, and turned in, only to turn out again in order to prop and stay our tent up in a howling nor'-west gale until four next morning. That day, the musterers came in, and we returned with them to Glenthorn. Two days later we came back to Lake Coleridge, and there turned our birds out into a cage with four birds they have there. The row those birds made all night attracted two wild ones down, and I shot them in the morning. That evening I decided to go on a mountain, about three miles from the house, and try for some birds there. Mr. D. Murchison went with me, and almost immediately on our arrival caught two birds, an old and particularly

vicious male, and a young female. As it was coming up a misty sou'-wester—good for birds—we decided to stay out all night, and set about cutting some manuka and tussock for a bed, which we placed alongside a big rock.

#### A KEA'S NEST.

Before dawn I was wakened by more calling, and went up to our traps. A bird came over and began calling, but would not come near the traps, staying down by the male bird we had caught the night before. I went back and saw her, with tail spread and wings drooping, run to the edge of a bluff and fly off into the ravine without a sound. I guessed immediately that she had a nest, and as soon as there was enough light we started looking for it. When we were just giving up hope of finding it, and were going to turn the male bird loose and follow him, we heard the female call away down in the bottom of a big rock slip, and I caught a glimpse of her as she moved. Hurrying to the spot, we found a lot of loose feathers and droppings, which indicated the presence of a nest. We soon located it, in a long hole, the entrance of which was formed by two enormous boulders, which leaned against one another, forming a triangular space, partly blocked by a third stone. This latter we removed by using a thick vine as a rope, and after much scratching and scraping I reached in, and striking a match, saw the bird on her nest. More scraping and digging among the small stones and earth, and then I reached in, but quickly withdrew my hand, minus a small piece of the middle finger. I then wrapped a handkerchief round my hand, and very soon had the bird out. I handed her to Mr. Murchison to hold, and she immediately took a piece out of his coat and clawed him pretty thoroughly, but my attention was on the nest, and, to my joy, I found four pure white eggs. They were laid on the ground among a few chips of rotten wood and bark, about five feet from the entrance of the hole.

More than satisfied with our night's work, we returned to the Lake, and that afternoon H. and myself, with many thanks for the hospitality and assistance we had received, left for home.

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## NOTES ON MY VISIT TO AUSTRALIA.

By DAVID SETH-SMITH, F.Z.S., M.B.O.U.

Some time ago Dr. Chalmers Mitchell, the Secretary of the Zoological Society of London, conceived the idea of holding a series of special exhibitions of the fauna of the different portions of the British Empire at the Zoological Gardens in Regent's Park, and the suggestion received the hearty approval and support of the Council. It was decided that the first of these exhibitions should represent the fauna of Anstraliasia, and arrangements were made to exchange collections with the various Zoological Societies of the antipodes, and the Governments of New South Wales and New Zealand promised their assistance by donations of animals.

The present writer sailed for Australia by the Orient-Royal Mail Steamer "Orotava," which left London on December 13th last, on behalf of the Zoological Society, to make all arrangements for the collection and transmission home of animals which were to form the Australasian exhibition, and it has been suggested to me that a short account of my trip, with especial reference to the birds I came across, would be of interest to some of our members.

### WESTERN AUSTRALIA.

On January 16th, 1908, we sighted the coast of Western Australia, and at 4.30 p.m. docked in Fremantle Harbour. Mr. E. A. Le Souëf, the Director of the Zoological Gardens at Perth, and his brother Mr. L. Le Souëf met me on arrival, and suggested that I should drive with them at once to Perth, a distance of ten miles, and see the Zoo before darkness fell, and I had to return to the ship to proceed towards the Eastern States.

The drive was to me of the greatest interest; gum trees of various shapes and sizes grew everywhere, and Wattle bushes, many of them in flower were scattered along the roadside. The Christmas Tree (*Myrsia floribunda*) covered with masses of brilliant orange flowers appeared now and again, but the time of flowers was considered to be past. Birds were scarce save for a few Magpies (Piping Crows) and dull coloured Honey-eaters of species we could not determine.

During our drive my companions endeavoured to impress

upon me the desirability of my staying for a week or two in Western Australia, where the fauna is of great interest, and several species survive which have long since disappeared in the older and more thickly populated States in the Eastern portion of the Commonwealth. A most kind invitation to stay from the Premier also reached me, and as I knew I should have no chance of staying on my way homeward I decided to return to the ship and make arrangements to proceed eastwards by the boat following a fortnight later. By this time we had reached the Zoo, which occupies a charming situation at South Perth, overlooking the beautiful Swan River. There was no time however to see much of the Zoo that evening, but Mr. Le Souëf had a pair of delightful little ponies put into a trap and hurriedly drove me round.

The Zoo was started in 1898, the idea originating with Dr. Hackitt of Perth, who invited the late Mr. Le Souëf of Melbourne to come over and choose the site. It is formed on a bed of some two hundred feet of white sand, so the difficulties that the present Director had to encounter can well be imagined. Fifteen acres were at first granted, and this has gradually been increased until at present the area is about forty-seven acres. However this is not all devoted to the animals, for with a small population the only way to make the undertaking pay its way is to devote a considerable amount of space, some five acres, to sports, especially tennis and cricket. The houses for the animals are mostly of a very light description which, in fact, is all that is needed in so warm a climate.

Carnivora and almost all of the monkeys succeed admirably and breed freely, but animals which naturally inhabit moist districts, such as Swamp Deer and such like do not do well in the dry climate of Western Australia.

There is one large octagonal aviary with open wire netting all round, which is devoted to Parrakeets and Doves. Here I noticed Stanleys, Kings, Rock Pebbles, Cockatiels, Rosellas, Many-colours, Redrumps and Bronze-wing Pigeons. Another aviary of the same kind, but much smaller, contained a collection of African Weavers of the commoner kinds. A small enclosure containing a pond with an island in the centre, was occupied by a pair of blue Porphyrios with several fluffy black



chicks. These birds breed freely here every year. A series of small aviary compartments contained Piping Crows, Winking, Boobook and Australian Barn Owls; Brown Hawks, and a splendid pair of Buff-breasted Laughing Kingfishers (*Dacelo cervina*), but perhaps the gems of the collection were six fine Banksian Black Cockatoos which occupied a small aviary to themselves. These birds lived almost entirely on Brazil Nuts, appearing to care little or nothing for any other food, but four of them which Mr. Le Souëf allowed me to bring home have now taken to a much more general diet. Ostriches do well here and have, I believe, bred, but I do not appear to have made any note on this point. Turkeys are allowed to wander loose about the Gardens, where they pick up insects and the crumbs left by visitors, practically keeping themselves, and thriving well in the dry climate.

Pheasants, especially the young ones, do not seem to thrive here, probably owing to the scarcity of small insect life in so dry a climate. Various Waterfowl are kept, and do well, the most interesting species I noticed being Eyton's Tree Ducks, of which there were several specimens.

Australian Finches are practically unrepresented in the collection, and so far no attempt has been made to keep the various Honey-eaters and other insectivorous indigenous birds.

Some years ago the Director liberated a number of Indian Doves—*Turtur cambaiensis* and *T. suratensis*, and these have thriven and are now abundant throughout the district. Piping Crows with cut wings are allowed to roam the Gardens, one albino specimen being a great favourite, and wild examples are often seen walking about the grounds with the captives. I must not forget to mention a pair of the fine Australian Bustards, known to the Colonists as "Wild Turkeys," which were allowed the free run of the Zoo.

Of purely wild birds I saw very few, the most common being the charming Black and White Fantail Flycatcher (*Rhipidura tricolor*), known there, as in other parts of Australia as the "Willie Wagtail" or "Shepherd's Companion." It is delightfully tame, and is generally seen on the ground searching for insects, all the time gently wagging its tail from side to side.

Now and then a small party of White-eyes would appear, busily searching for small insects amongst the foliage and flowers. This Western form is the Green-backed species (*Zosterops gouldi*), which, at the time of my visit was not nearly so numerous as I found the Grey-backed form, *Z. caeruleus*, in the Eastern States. The pretty Yellow-rumped Tit (*Acanthiza chrysorrhoa*) was also fairly common.

We started to drive back to Fremantle at eight o'clock; the horses we had used on the outward journey being unavailable we had to be content with a couple of noted "jibbers" which however took us allright to the ship. Here it took me some time to make arrangements to break my journey here and to pack up my belongings, and it was about eleven o'clock when we left the second time for Perth.

All went well for the first part of the journey where the road was good, but presently the horses began to show signs of fatigue and we suddenly remembered that before us the road was uncommonly bad, having been pounded up into masses of loose chalk and sand by the heavy traffic occasioned by the building of a bridge. My companion knew that if once this pair of jibbing horses were to stop, it would be extremely difficult to persuade them to start again, and so it proved. As we approached the loose track the horses were whipped up to a canter, but as the wheels sank in the loose surface both steeds suddenly stopped dead, and nothing that we could do by whipping and pulling would persuade them to move forward one single step. Some navvies engaged on the new bridge came from their shanties to help us, and after some three-quarters-of-an-hour had been spent in pulling both horses and buggy along we got on to a better piece of road and the horses condescended to pull, but, as one of our navy friends observed, by far the worst part of the road was yet to come, and we saw visions of a night spent in the bush. The horses travelled well enough on the hard surface, but we soon approached a stiff incline where the surface was if anything worse than at the first place. We rushed full tilt into this and, as before, our steeds pulled up at once and commenced to plunge and kick while the traces hung slack and nothing that we could do would make them try in the least degree to pull. The only thing to be done was

for Mr. Le Souëf to ride one of our steeds back to Perth, a distance of some four or five miles, for assistance in the shape of other horses which were not jibbers. This he proceeded to do while I lit my pipe and prepared to make myself comfortable on the buggy. The time was now about 2 a.m., the night delightfully warm, but the mosquitoes somewhat unpleasantly in evidence. Presently the "swish swish" of wings sounded clearly overhead as a large flight of ducks passed over. In the distance a Boobook Owl was uttering its note which has been likened to the words "More Pork" or "Mopoke," and a second specimen soon commenced to answer it. This note was long supposed to be uttered by the Frogmouth (*Podargus*), hence the latter bird is even now frequently termed the "Mopoke," whereas its note is really entirely different.

After waiting for about half-an-hour the sound of a galloping horse greeted my ears and I presently made out the form of Mr. Le Souëf coming towards me. "Well, how have you got on?" I said. "Tried to take a short cut home and got bushed, and have only just found the road again," was his reply. "Let's have another try with these two horses," he added. We harnessed in again and my companion got a rope on to their heads while I took the reins and whip, and with all our might we endeavoured to make those horses pull. But, not a bit of it, nothing would induce them to strain a muscle in the right direction. They were jibbers of the worse type, plunging and kicking for all they were worth, until finally they smashed the pole of the buggy and we were left in a worse predicament than ever.

There was nothing for it but for my friend to make a second attempt to ride home for assistance, and this time he wisely kept to the road. Meanwhile I settled myself down for another lonely hour, while the Boobooks kept me awake with their oft-repeated call of "mo-poke, mo-poke."

At four a.m. my friend arrived, followed shortly by one of his men in a "sulky," who had been roused from his slumbers with the greatest difficulty. My baggage was soon transferred from the broken buggy, which we left by the road side to be fetched later, and we reached my friend's house in the Perth Zoo just as daylight was breaking.

*(To be continued).*

## BIRDS OF PARADISE AT THE ZOOLOGICAL GARDENS.

The most wonderful collection of living Birds of Paradise that has ever been got together is now on view at the London Zoological Gardens, no less than ten species being represented. The Greater (*Paradisea apoda*), Lesser (*P. minor*), Red (*P. rubra*), Twelve-wired (*Seleucides alba*) and King-birds of Paradise (*Cicinnurus regius*) have been some time in the Gardens, and on June 30th a new collection from New Guinea arrived, containing five other species, four of which are now exhibited for the first time.

Mr. C. B. Horsbrugh sailed for New Guinea in December last, on behalf of the Zoological Society and Sir William Ingram, his object being to obtain living Birds of Paradise. Considering the great difficulties inseparable from such an undertaking Mr. Horsbrugh deserves the hearty congratulation of aviculturists on the success of his expedition, he has safely brought home the following birds:—Several specimens of Count Raggi's Birds of Paradise (*Paradisea raggiana*), one of the finest of the genus to which it belongs, being not unlike the Great Bird (*P. apoda*) but with red plumes instead of yellow; eight examples of the Magnificent Bird of Paradise (*Diphyllodes speciosa*), one of the most extravagantly decorated of birds; one New Guinea Rifle-bird (*Ptilorhis magnifica*) perhaps the most beautiful of any, of a velvety black colour with metallic reflections and a pectoral shield of brilliant shining green. The Six-plumed Bird of Paradise (*Parotia sexpennis*) is represented by seven specimens, all in good condition, but none at present showing the characteristic plumes, three of which grow from each side of the head. There are also some four or five Manucodes (*Manucodia chalybeia*), two Gardener Bower Birds (*Amblyornis subalaris*), three New Guinea Cat-Birds (*Aelurædus melanocephalus*), one Red-breasted Lory (*Lorius erythrothorax*) and some Fruit Pigeons. The majority of these birds are imported for the first time.

D. S.-S.

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## CAPTIVITY *VERSUS* FREEDOM.

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I was much interested by Mr. Galloway's article on "The Weather and our Summer Birds." The part which specially took my attention is his pronouncement in favour of captivity *v.* freedom.

Mr. Hudson, if I recollect right, thinks captivity the greatest misery a bird can endure. How birds regard it is, like the question of food and temperature, one we have by no means found the answer to yet. My experience is almost entirely confined to parrots.

As a rule you may always despair of getting back the long-tailed parrots which escape—excepting Macaws—and you may always hope to recover the short-tailed ones; and the parrot that does come back, as a rule, does not much appreciate liberty. Their great desire to come back into the house, and the mischief they may do, when they do get in, is one of the drawbacks to letting them out. But the question of returning is not entirely decided by their having or not having lost their fear of man. I knew a Bengal Parrakeet so devoted to his owner that he felt he might safely take it out of doors on his shoulder. It flew to the top of a high tree, and nothing would persuade it to return that day, and by the next morning it was gone never to be recovered. But only let me *find* the short-tailed bird that has flown away, and even if not very tame, he will probably come back to his cage.

Macaws form the exception to the long-tails not coming back, and Cockatoos form the exception to the short-tails coming back, but I think more because they are so very strong on the wing that they fly too far afield in the first instance. I knew a Bullfinch, which was caught wild, and got away, and returned of its own accord. But I have reared linnets by hand, and had them tame enough at first to return to my whistle, but they very soon lost their tameness and went for food. When I first came to this Vicarage, some 34 years ago, I bought a Blackbird. All went well, till I also bought a Magpie. It may have been coincidence, but the Blackbird moped and seemed going to die, so I opened its cage and gave it its liberty, Next day it returned of its own

accord to its cage, quite restored and lived happily for some time after.

I am left to the conclusion that a bird's preference for liberty or food is very much a matter of individual taste, and that it is impossible to say all birds prefer comfortable captivity.

F. G. DUTTON.

## CORRESPONDENCE, NOTES, ETC.

### BREEDING OF THE STANLEY PARRAKEET.

(*Platycercus icterotis*).

SIR,—In the beginning of June, after one of my hen Stanleys had been for some time in a log nest, I distinctly heard the cry of a young bird when the mother returned from a forage at seed pan, grass seeds, apple, etc. After a fortnight I looked in the nest box, and saw that there was one nice young one beginning to feather, and one addled egg.

On the 6th of July the young bird was all but ready to leave the nest, and anticipating this with tremblings as to whether it would dash against the wire meshing, or something of the kind equally prolific of disaster, I took him out and put him in a cage, through the rather wide bars of which the mother fed him.

I say "him," because the bird has a bright patch of red above the nostrils, and is decidedly reddish on the lower parts. A fine young bird.

The male Parrakeet never paid the slightest attention to his mate; never fed her when she left the nest to hurriedly obtain what she could in a limited time; never seemed to recognize his one and only child as anything to do with him.

But now his son and heir has come of age, he appears to be more sociable with his wife.

Being youngish birds, it is probable that the first clutch of eggs would be a small one. I hope that next time there will be more.

HUBERT D. ASTLEY.

SIR,—You will be interested to know I have some young Stanley Parrakeets just about to leave the nest.

Have Stanleys been bred in England previously?

I have some interesting hybrids, also between cock King Parrakeet and hen Barraband Parrakeet, ready to leave the nest.

July 5th, 1908.

WM. R. FASEY.

### THE SHOEBILL.

SIR,—In the *Avicultural Magazine* for May 1908 there was an article on the Shoebill, written by me, in which several misprints occurred which

I should be obliged if you would be so kind to have corrected. I have compared the printed copy with the type-written one I sent in, and can find no reason why the printer should have made the following alterations:

P. 193. 4th. line from bottom, for "application" read "appellation."

P. 195. 18th. line from top, for "Trincule" read "Trinculo."

P. 196. 9th. line from top, for "latest" read "later."

P. 196. 12th. line from top, "Umbre" should not be in italics.

P. 196. 8th line from bottom, for "403" read "401"

P. 197. 11th. line from top, the word "latter" has been omitted from before "locality."

P. 197. Bottom line, for "tarsus 10 to 12½," read "tarsus 10 to 10½."

I would also venture to remark that on nearly every page I find my punctuation has been altered, at any rate in one case altering the sense of a paragraph.

I am very sorry to make any criticisms on such an excellent and useful journal as the *Avicultural Magazine* but accuracy is essential to its usefulness.

S. S. FLOWER.

GIZA, EGYPT, June 30th, 1908.

#### CAGE BIRDS AND PANICS AT NIGHT.

SIR,—I am much interested in a reply from one of your correspondents in the July Number of the *Avicultural Magazine* to the query headed "Bullfinch losing feathers," and would be glad to give my experience and suggestions as to the cause of "Panic" which cage birds seem subject to at night. I have three Canaries, one Bullfinch, one foreign finch and three Linnets in a large aviary cage which I keep in the greenhouse during the day and on a table in a spare room at night. On four different occasions I have found on uncovering the cage in the morning that one of the Linnets was seriously mutilated, the flight feathers literally cut clean off leaving only the stumps, and the end of the wings grazed and bleeding. I naturally thought this was due to *mice*, as these have often been a trouble in other ways. I then had the cage suspended from the middle of the ceiling in another room. The same thing occurred again, and I was in despair. Then I left the door open to enable me to hear them and keep watch. Between three and four o'clock in the morning the fluttering began again. I quickly turned on the electric light and quieted the birds by calling them by name. All were silent at once, and I then felt sure that "mice" were not the culprits. On mentioning this to a friend who is a lover of birds and really understands them, he tells me these sudden panics are sometimes due to "Moonlight," and also to their hearing the call-note of a migrant bird during the early hours of the morning, and in their anxiety to fly with them, their poor wings are cut and bruised against the bars of the cage. This occurs especially in Spring and Autumn and I find it is so. I see in Mr. Farmborough's article in the July number on

"British Rails," he gives an instance of the same thing, and calls it "Migratory Fever." I consider this the solution.

The Linnet I have, rebels against captivity more than any bird I have kept, and I have decided to give her her liberty. She is always the sufferer, and has been cruelly injured each time. Last week I heard the flutter of wings at 3.20 a.m. and *very* suddenly. At the *same* time a Blackbird was giving his early call-note in my garden. I feel sure the Linnet heard it and hence the panic. I noticed that two of the Canaries were sound asleep while the fluttering continued, and my voice soon pacified the restless ones.

It would be interesting to know if other members of our Society have had the same unpleasant experience and I should be grateful for any further light on the subject. (Miss) GEORGINA WOLFE.

#### THE USE OF GENTLES AS FOOD FOR BIRDS.

In the June number of our Magazine, Mr. St. Quinton asks members to give their experience as to the use of gentles for feeding insectivorous birds. My experience with these has been perfectly satisfactory, and I have never known a case in which harm has resulted from their use. But it is absolutely essential that they should be thoroughly cleaned before use, by being kept for at least three days in clean dry sand. When properly cleansed, I believe them to be perfectly wholesome and more digestible than mealworms. Some birds will not touch them, but most eat them readily and do well on them.

When I was in Melbourne, I went to see the most interesting collection of insectivorous birds kept by Miss Helen Bowie, one of the few aviculturists in Australia and probably the most experienced as regards soft-bills.

She employs a boy to collect the small gentles of the house-fly which propagate in horse-manure. These are much smaller than the ordinary larva of the blow-fly and seem admirably suited as food for very delicate insectivorous birds. Miss Bowie has kept for a long time with perfect success such birds as Blue Wrens, Yellow-breasted Robins and such like.

D. SETH-SMITH.

---

## POST MORTEM EXAMINATIONS.

---

PECTORAL FINCH. (Miss Dewing). This bird died of pneumonia. It was a hen.

SHAMA. (The Countess of Harewood). This bird died of congestion of the liver.

*Answered by post :*

Mrs. Connell. Mr. Barlow.

Mr. A. Trevor-Battye.

Capt. J. W. H. Seppings.

Mr. St. Quintin.

Lady William Cecil.

The Earl of Harewood.

ARTHUR GILL, M.R.C.V.S.



### III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

#### NEW MEMBERS.

- Mr. WILFRED FROST; 103, Goldhawk Road, Shepherd's Bush.  
Mr. WILLIAM JOHN BANKS; Restdown Hall, Alfred Street, Canterbury, Sydney, N.S.W.  
The Rev. FATHER MCGEE; Bathurst, New South Wales.  
Mr. S. L'E SOUËF; Zoological Gardens, Moore Park, Sydney, N.S.W.  
Mr. ALEX. BORTHWICK; Vereena, Canonbury Grove, Dulwich Hill, Sydney, N.S.W.  
Mr. A. W. MILLIGAN; c/o Messrs. Parker and Parker, Perth, Western Australia.  
Mr. R. STAPLES BROWNE; Bampton, Oxon.

---

#### CANDIDATES FOR ELECTION.

- Miss DORIAN SMITH; Tresco Abbey, Isles of Scilly, Cornwall.  
*Proposed by Mrs. LEE.*  
Mr. MARTIN CUNINGHAM; Goffs Oak House, Chestnut, Herts.  
*Proposed by Mr. C. B. HORSBURGH.*  
Mrs. WALTER THOM; Wirswall Hall, Whitchurch, Salop.  
*Proposed by Mr. A. A. THOM.*  
Mr. G. E. RATTIGAN; Lanark'slea, Cornwall Gardens, S.W.  
*Proposed by Mr. F. W. S. BARBER-STARKEY.*  
Lieut. G. KENNEDY; 4th Gurkha Rifles, Bakloh, Punjab, India.  
*Proposed by Capt. PERREAU.*  
Lady BLAKE; 5, Hans Mansions, S.W.  
*Proposed by The Hon. F. WALLOP.*  
Dr. R. T. McGEAGH; 23, Breeze Hill, Boothe, Lancs.  
*Proposed by The Hon. Business Secretary.*  
Mr. A. L. KETH-MURRAY; 1, Chudleigh Villa, Bideford, North Devon.  
*Proposed by The Hon. Editor.*  
Miss AUGUSTA BRUCH; 42, Hill Street, Berkeley Square, London.  
*Proposed by Miss DRUMMOND.*

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#### CHANGE OF ADDRESS.

- Mr. HARRY B. BOOTH; to Co Ryhill, Ben Rhydding, Yorks.

---

#### MEMBERS' SALE AND EXCHANGE COLUMN.

*The charge for private advertisements is SIXPENCE FOR EIGHTEEN WORDS OR LESS, and one penny for every additional three words or less. Advertisements must reach the EDITOR on or before the 26th of the month. The Council reserve the right of refusing any advertisement they may consider undesirable.*

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Miss GLADSTONE; Parkstone, Dorset.

(Continued on opposite page).

**JOHN D. HAMLYN,**  
**NATURALIST,**  
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## THE JOURNAL OF THE AVICULTURAL SOCIETY.

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(Continued on page iii. of cover).





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# Avicultural Magazine,

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SEPTEMBER, 1908.

## NESTING OF THE WHITE-CRESTED TURACO.

*Turacus corythaix.*

By HUBERT D. ASTLEY, M.A.

I commenced in 1907 with four specimens of these beautiful birds, and all of them wintered successfully out of doors, with a warm roosting house to go into, but the windows of it were always open, by night as well as by day.

In the early Spring one Turaco was found dead, in splendid plumage and condition. From a bruise on its forehead, it looked as if it had flown against the wire.

Not long after two of the Turacos began to bully the remaining third, a fact of which I was unaware until it was too late, and the poor thing succumbed to its injuries. It had been chased constantly, and not allowed to eat, and at length it became paralysed. This persecution was entirely because the two that are left are a male and female; who had evidently made up their minds that they must have the place to themselves, as far as their own species was concerned. They never offered to touch or molest any of the other birds, such as Stanley and Black-tailed Parrakeets, Palm Doves, Red Cardinal, etc.

Then in June began much 'Touracooing,' by which I mean much frog-like croaking on the part of the male, whose voice could be heard quite half a mile away. When strawberries were thrown in he would call to his mate to come down, and he then picked a berry up and placed it before her, or else she would take it from his beak. I placed a large hamper lid amongst some branches in a secluded corner of the aviary, in the inner part of the roosting house, and both birds carried up a quantity of sticks. It was not until about the 15th of July that the hen

Turaco kept to her nest, whilst the male generally sat on a branch close by, I believe she came off in the morning and the evening. Several times I saw him feed her when she was off for a few minutes in the evening. They are a very devoted couple, but inexperienced.

On the 12th of August, seeing that both birds were sitting on the branches outside the nest, I took the opportunity of introducing my light-weight aviary ladder, a telescopic one, to have a peep. There is a moment of exciting suspense as one mounts the ladder to a nest which is placed about twelve feet from the ground. I *did* peep, and saw to my great disappointment, a poor little dark brown body about the size of a Bantam chick, but only a body. The spirit had flown! It *might* have waited a little bit, and then it could have taken the body with it. I packed it off quickly for more scientific eyes than mine to examine it; but I noticed that the toes were inclined to be like the majority of other birds, that is: three in front and one at the back; whereas the adult Turaco has semi-zygodactylous feet—with reversible outer toe, like the Cuckoos, two either way. It is very difficult to write so that one can satisfy our Museum friends and not fluster our other friends who wonder whether a Turaco with a semi-zygodactylous foot is a bird at all, or only some creepy-crawly! Let me comfort them by saying that when I wrote that mouthful (I am not going to write it again!) I glued my eyes to a reference book, held my breath, and ran my pen along the paper for dear life! Even the name Turaco is misleading, for when I possessed four, I told a young member of my family that he must go and look at them. He did so, and announced at luncheon that he was quite *certain* I had said there were two Racoos, and he had *seen* four!

I feed my birds on boiled rice, potato and carrot, with strawberries, cherries, grapes, banana and sometimes melon. The parents are in such splendid condition that I supposed this varied 'menu' would be suitable for the young one.

I saw no trace of any egg-shell, and I *had* hoped to find two young birds, for I believe two eggs are laid in the wild state. Certainly one has very constantly to murmur "*Pazienza*" along with the Italians.

---



## WOOD-SWALLOWS BREEDING IN CAPTIVITY.

By E. J. BROOK.

A pair of White Eyebrowed Wood-Swallows (*Artamus superciliosus*) have reared one young one that is now flying in the aviary. Am I right in supposing that this is the first instance of a Wood-Swallow being reared in captivity?

When I saw that this pair of birds had mated, I found a bit of a tree root with a rotten cup-shaped hollow in it. I wired this lump of wood on to one of the joists of the roof inside the aviary, and close up to the boards of the ceiling.

The pair soon took to this nesting-place and carried in a few very small bits of stick but made no regular nest. The first egg laid proved clear; after this one was removed another was laid three days later but was broken, four days after that another was laid and successfully incubated.

Both parent birds sat, relieving each other at short intervals. The egg hatched on the 14th day I think, and the young bird left the nest fourteen days later. Both parent birds fed the young one, but the cock was the best feeder, and much the keenest to find tit bits such as small flies, etc. Only live insects were given to the young bird until it left the nest, but since then the cock has given it occasional morsels of the ordinary insectivorous mixture.

While the young bird was in the nest the old birds kept the nest clean by removing the excreta in their beaks as Starlings do.

The young Wood-Swallow was practically reared on meal-worms as other insects have been very difficult to get, there being very few caterpillars in the garden this year, and the old birds would not look at woodlice, cockroaches, etc. A dead rabbit proved very useful to attract flies, and it was a pretty sight to see the old birds catching them.

The young Wood-Swallow is a dull dirty grey in colour, the breast being much lighter than the back, and the whole is striped and mottled with dirty yellow. The beak is very short and horn coloured, and this is the colouring of the legs.

---

## THE BREEDING OF THE PARTRIDGE TINAMOU.

*Nothoprocta perdicaria.*

By C. BARNBY SMITH.

In the early part of 1907 I obtained (through Mr. Thorpe, of Hull) a pair of these Chilian birds and placed them in an aviary consisting of a roomy shelter shed facing South, with glass verandah in front, the rest of the run (about 30 square yds.) consisting of rough grass with plenty of large tufts, some of which also extended underneath the verandah. I fed the birds at first on mealworms in addition to small seeds, but subsequently found that to give the former—or indeed any insect food—was quite unnecessary, as the birds kept in perfect health on the small seeds alone, though of course they picked a good deal of green food for themselves.

These Tinamous are very nervous birds and spend a good deal of time by day hiding under grass tufts. They make small hollows to lie in, and the danger of inadvertently treading on the birds is very great. The flight is very rapid and I had to cut some wing feathers to prevent the birds dashing themselves against the top of the aviary when suddenly surprised. Except when surprised or frightened they do not often take to their wings. They seem to feed chiefly about dusk. They are very silent birds, though occasionally, when alarmed, uttering a small piping cry. They can run rapidly, but naturally move a few steps at a time and look round with a quick nervous movement. I was doubtful whether they would stand an English winter without artificial heat, but determined to try. Accordingly I wired off a good portion of the outside run and put fir branches, dry grass, and bracken in the shed so as to induce the birds to seek cover inside. This was only a partial success, as in the worst weather last winter I often found them under grass tufts outside the shed.

The cock Partridge Tinamou is said to be smaller than the hen, and as I had no prospect of getting any more birds I vainly tried to persuade myself that my birds differed in size, but had to admit in the end that there was no recognizable difference, and with this all my friends agreed. However, in June 1908, signs of pairing were apparent, and on the 18th June under a large tuft of

grass the nest containing five eggs was found. The nest consisted merely of a hollow lined with dry grass. The eggs were dark chocolate in colour and looked very highly glazed. I never saw eggs with a more artificial look. They were one and five eighths inches in length. The cock Tinamou was sitting closely when found and was noticed to leave the nest for a few moments on the 20th and 22nd. If disturbed from the nest he would soon come back to see that all was well after the intruder had gone away. Between the 18th and 28th June the hen bird kept near the nest. On the latter date the cock grew restless and the following morning the hen was accordingly removed. I am sorry I cannot say definitely the period of incubation. My aviary keeper tells me the bird was not sitting on the 14th, but he might possibly be mistaken if he saw the cock bird off the nest on that day.

On the morning of 5th July the cock Tinamou was found squatting some distance from the nest and two chicks rushed through the inch-mesh wire netting of the run into a neighbouring hedge. These were duly secured, as also a third. A fourth found its way to the Californian Quails and the cock quail (according to his custom) promptly killed the chick. The fifth egg was afterwards found to contain a half developed chick, though how or why this came about, I don't in the least understand.

The three rescued chicks were put with the old bird into the shed but one died two days later. The old bird brooded the others closely for the first few days, after which they began to move about on their own account, generally taking shelter in a tuft of grass near the parent bird. For the first ten days of their existence the chicks lived mainly on cleaned gentles, but took a little yolk of egg and fresh ants' eggs in addition.

During the first week of their lives they were curious rough looking little creatures of a mottled brown colour, almost impossible to see when squatting at even a yard distant. At the end of that time they began strikingly to resemble the parent bird, the head in particular being a perfect resemblance in miniature, except the eye which was blue. The movements of the chicks also curiously resembled the movements of the old bird—the same

quick sudden runs ending in sudden stops under tufts of grass, and the same anxious jerkings of the head. I have never seen any young birds of this age such an exact replica of the parent. The chicks were very difficult to feed after the first week as, apart from the difficulty of finding them, one could never be sure that they would not rush off to hide and fail to find the food. On the 19th July the chicks were seen to eat millet and canary seed for the first time, and a day or two afterwards were allowed a considerable portion of the outside grass run—a change which they greatly appreciated, and afterwards remained entirely in the open.

There is really very little else worthy of being recorded concerning these chicks. By the end of July they had got the full plumage of the parent bird, the only noticeable difference being that the chicks were a little darker on the back. They had by this time attained a considerable size and were well able to look after themselves. They never seemed to care for lettuce when offered them, and though very fond of most kinds of insects, would not look at blackbeetles. By the 5th August their eyes had changed colour and resembled those of the old bird, but a little lighter. I perhaps ought to mention that these birds have been reared on a dry gravel soil, this I should judge important.

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## NESTING OF BROWN-THROATED CONURES.

By Mrs. WILLIAMS.

It was in April 1906 that I received the little party of four Brown-throated Conures from a fellow member of the Avicultural Society. One has since died, but three so far flourish. The pair are together, the odd bird being in another compartment of the garden aviary.

I was away from home when the news reached me that on the 20th June (1908) the voice of a baby Conure had again been heard issuing from the nesting-box. I was not very excited, but hope deferred maketh the heart sick, or at any rate despondent. I heard of the infant's arrival with the remark "Oh! I wonder if they will rear any, but it is not at all likely, they have made so many attempts and always forsake the babies when a few days

old." But I was wrong! and now three fine young *Canvases* are sitting in a nice tidy run with their proud parents. The first came out of the nest on July 24th; the second a week later, on the 31st; the third on the 4th August.

The parents were kept well supplied with soaked bread squeezed dry and soaked Canary seed; they also had green stuff and fruit.

The babies were nearly as big as their parents when they came out and could fly well, though they do not fly about much, being content to sit very solemnly on their perches. The eye is surrounded by a whitish ring and the head is much greener than in the adult birds. They can feed themselves but much prefer being fed.

*August 15th, 1908.*

[The third young bird mentioned above died on August 20th, and the body was forwarded to the Editor. It was a fine, well-grown bird, and had evidently been well able to look after itself for some time.]

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## THE BRITISH RAILS.

By PERCY W. FARMBOROUGH, F.Z.S.

*(Continued from page 247).*

The Water Rails, which are in the same aviary as the Land Rails, are not nearly so wild and retiring in their habits as are their land relations, and when caught adult seem to take to captivity fairly well. Like nearly all the long-billed birds they are rather given to using their bills aggressively when handled, and seem to especially select the face of their supposed enemy as the target for their "dabs."

The first Water Rail that came into my possession could hardly be called an aviary bird, or even a cage bird, as it was a shot bird, injured in the wing, and used to go about the house moving from room to room at will. This bird would permit almost anyone to freely handle it without showing any sign of resentment, and did not in the least mind being picked up and stroked. Nearly all birds—either wholly or partially of an insectivorous nature—seem to become rapidly reconciled to confinement even when caught adult, and many will take food from

one's fingers within a few hours of being captured, especially if the "tit bit" be a nice "wriggly" mealworm.

Like most of its genus, the Water Rail is not often seen by the unobservant eye, even in places where it is known to be plentiful. On Saturday, July 18th, I was going through Kent in the early morning hours, visiting my family who were staying at Deal, and I noticed as the train sped through the county that, in nearly every field in the immediate proximity of water, there were two or more Water Rails feeding; in one meadow I counted seven rooting about with their beaks in search of food, within twenty yards of the railway track along which the train was passing; in fact, not only were Rails plentiful, but bird-life generally was well represented.

Apropos of the feeding of Rails and with reference to the soft foods on which the Crakes were fed, concerning which I wrote last month, my friend Mr. Frank Finn, whose knowledge of avian life, and especially the wading and natatory birds, is encyclopædic, tells me that he has noticed that the short-beaked rails, like the Crake, are to a certain extent seed-eaters, and not nearly so entirely insectivorous feeders as the long bills, like the species now under consideration. This is a point I had not noticed, and as there is plenty of undergrowth and herbage in the aviary, it is quite likely that the Crakes have been taking advantage of the seed pods and heads of the various grasses and plants which were growing there without myself being any the wiser.

All the Water Rails in the enclosure were caught when adult birds and have never shown the slightest disposition to nest. Two of them were caught one winter; they had been noticed day after day coming into the farm yard where the warm chicken food was put out and sharing the contents of the dish with the fowls. One day a carter was bringing a waggon and team into the yard and he noticed two rails run off and hide behind a pile of brushwood; he left his team and found the two birds crouched down trying to conceal themselves as they had got into a cul-de-sac between the brushwood and one side of an outbuilding. He said they made no attempt to fly away, and all he had to do was to pick them up in his hands and take them

into the house. They were turned into the aviary the same day and made themselves quite at home at once. They are very fond of paddling along the shallows of the water and investigate every floating leaf or moving object on the surface of the water, whether animate or inanimate, being much more inquisitive in this respect than the Land Ralls. It was very amusing on one occasion to observe the excitement set up by the dropping into the water of a large dor-bettle which had evidently struck the roof netting of the aviary during its flight and fallen through; all the water birds at once went out to see what the curious black whirling object was gyrating on the water, first one would pluck up courage to attempt to seize one leg only to drop it almost at once, then another would try only to repeat the same performance, the end of it being that a heron who had been gravely watching the antics from the shore, marched into the water, crushed the beetle in its beak and sedately stepped back again as if to put a stop to the unseemly behaviour of the other birds.

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## CRANES, ETC., AT WOBURN.

By the Duchess of BEDFORD.

The following notes regarding Cranes and other birds which have nested at Woburn this summer may be of interest to some of the readers of the *Avicultural Magazine*.

The Sarus Cranes (*Grus collares*) have a strong chick about six weeks old.

A second pair nested early in the year and laid an egg, which was buried in snow the following day. They nested again later and sat the full time but the eggs were unfertile. With praiseworthy persistency they have now made a third nest and the hen is sitting.

The Common Crane sat for the full time on eggs which in the end mysteriously disappeared, but they started a new nest at once, and have now a half grown chick. A second pair sat for a considerable time but were driven off by a Black-necked Swan.

The White-necked Cranes (*Anthropoides leucacchen*) have two thriving young ones, hatched early in June.

The Australian Cranes (*Grus australasiana*) also had two, but they attacked one, which we have had to bring up by hand and killed the other when half grown.

Amongst the Swans, the Trumpeter and Black-necked, both have young. Bewick and Whooper Swans lay and sit every year, but the eggs are always unfertile. The Whoopers, however, having become bored with the unsatisfactory proceeding of sitting on unfertile eggs, turned a Black Swan off her nest, hatched and brought up the young, to whom they behave as devoted parents.

The Cereopsis Geese have three young as large as themselves. Another pair had four young, but they nest very early and bad weather settled the fate of the whole broods.

Snow and Blue Snow Geese breed here annually; there is also a brood of White-fronted Geese and also of Bernicle Geese.

Amongst the Ducks the following have hatched out broods:—

Brazilian Teal (*Nettion brasiliense*).

Versicolor Teal (*Querquedula versicolor*).

Fulvous Duck (*Dendrocygna fulva*).

Bahama Pintail (*Poecilonetta bahamensis*).

White-Eyed Duck (*Nyrora africana*).

Red-Billed Tree Duck (*Dendrocygna autumnalis*).

The Red-Crested and Dominican Cardinals, which have been at large all the year, have had several nests and hatched young in the garden.

The Orange Weavers have also made a nest in the garden, but did not get beyond that.

I am glad to say that we have just added six Hooded Cranes (*Grus monachus*) to our collection.

Woburn Abbey, Woburn,  
July 18th, 1908.

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## THE KURRICHANE BUTTON QUAIL.

*Turnix lepurana.*

By Major B. R. HORSBRUGH, A.S.C.

This little Hemipode is quite a common summer resident in the Potchefstroom district, and I have found it all up the Western Transvaal as far north as Mafeking.

When shooting Cape or Harlequin Quail it is often met with, but as a rule it is mistaken for a Quail chick and is not fired at.

It has a great partiality for mealie fields, and here it runs like a swift rat through the weeds, but I have rarely found it in the grassy vleis in which the two species of *Coturnix* (*delegorguet* and *capensis*) lie.

On the wing it is really quite easily distinguished from a true Quail: it looks much lighter and swerves very much more; it does not fly far, and after one flight it will rather suffer itself to be caught by a spaniel than get up a second time. On rising the true Quail gives a sharp cry of "Kree—kree—kree" but the Button Quail is quite silent.

Sclater says of this bird "that it is widely distributed throughout the whole of S. Africa, except perhaps in the western half of Cape Colony, Beyond our limits (*i.e.* S. of the Zambesi River) it extends northwards to the Gold Coast and to North-East Africa and Aden."

Like so many other S. African birds its time of migration depends on the abundance of its food and on the severity of the cold weather.

In February 1907 my brother bought four of these little Quail from a Dutch boy in Pretoria and sent them to me; they turned out to be three hens and one cock, and in my large aviary they lived a retired existence among some tall grass till the end of the following September.

About that time I noticed that the cock and one of the hens were very friendly and never far apart, so I moved them into an aviary where there was more cover and which was only inhabited by a pair of Cut-throat Larks or Cape Long-claws (*Macronyx capensis*).

On the 3rd of October we noticed the pair of Button Quail

in a great state of excitement; a nest had been made in a thick tuft of grass and the birds stood facing away from it, throwing bits of dried grass over their heads in its direction; the first egg was already in the nest.

On Oct. 5th the second egg was laid, and in exactly twelve days the two extraordinary little ones were hatched. In colouring they reminded me of that peculiar caterpillar found on hedges at home in spring, I think it is the Gold Tail Moth but I am not quite sure.

The cock bird did the whole of the sitting, the hen never came near the nest but went restlessly up and down the aviary "booming" for another mate, and for some weeks the whole garden resounded with her curious ventriloquial note which sounded like "Oooop." One chick was accidentally drowned and the other was about half grown on October 27th.

I then went down to Cape Town and, to my great annoyance, when I returned ten days later I could find no trace of the young *Turnix*. The cock, however, had made a new nest close to the site of the old one, and was sitting on four eggs, two of which he hatched on November 19th, when he deserted the other two. I opened these two eggs and found them to contain dead young just ready to come out. The chicks after the first or second day are most wonderfully active and move round the aviary as fast as mice.

The cock bird I have is wonderfully tame and will allow himself to be picked up without struggling, and always brought his young up to my hand, out of which he took mealworms and fed them. This simplified the rearing of these tiny things very much, but in this species after the young are a week or ten days old they are frequently fed and brooded by the female: this I have often seen her do, though if the youngster does not hurry up and come for the mealworm she swallows it herself.

The two young referred to above turned out to be both hens, and on December 17th their eyes had changed from black to the pearl colour of the adult bird, which they completely resembled in all respects.

In the following March (1908) I missed the cock Button Quail and suspected he was sitting, but the cover in their aviary

was so thick that I did not risk searching for him and perhaps disturbing him. On March 24th I found him waiting at the aviary door with a newly hatched chick under him, which he fed on some huge mealworms. The next morning, when I went to look at him, I found three chicks under him, so that he must have gone back to the nest and hatched off these during the night. On the 26th, to my great surprise, I found a fourth chick with him; he is the only male I have so that there can be no question of the young being hatched by different males. Three of these chicks he has successfully brought up, and I now believe I have two or three males.

Since starting this article I have been posted to Bloemfontein, O.R.C., for duty and have brought the Quail with me, and I hope this summer to rear a few more if I have any luck.

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## NOTES ON MY VISIT TO AUSTRALIA.

By DAVID SETH-SMITH, F.Z.S., M.B.O.U.

*(Continued from page 291).*

The morning of the next day was spent in the Zoological Gardens arranging various business matters in connection with the object of my visit.

In the afternoon my host drove me round the town of Perth. The Zoo is situated on the opposite bank of the river to the town and is usually approached by means of a ferry which runs every quarter of an hour, but by road the distance is considerable. From the Zoo the road strikes eastward, then runs along by the river for perhaps a mile, until a bridge of several spans is reached, which crosses the wide shallow river.

Shortly after starting I was delighted to see my old friend the Sacred Kingfisher (*Halcyon sancta*) perched upon a telegraph wire by the road side. It reminded me of a delightful pair of these birds I kept some years ago.\* Where the road crosses the river the latter is very shallow with numerous mud banks overgrown with rushes. Waterfowl were numerous, and as they are here strictly protected they are very tame. Quite close to the

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\* Vol. VI. (First Series) page 117.

bridge were large flocks of wild duck (*Anas superciliosa*), Cormorants (*Phalacrocorax carbo* and *P. hypoleucus*) were numerous, while here and there on the surface of the water the large body of a Pelican (*Pelecanus conspicillatus*) could be seen. Black Swans, from which the river takes its name, are still much in evidence, several pinioned birds are kept here and these attract the wild ones which are sometimes quite numerous. Silver Gulls (*Larus novæ-hollandiæ*) were very common up the river, and we noted two or three specimens of the Caspian Tern (*Hydroprogne caspia*).

We drove through the King's Park which is of considerable size and, for the most part left absolutely wild, and therefore, one would imagine, particularly attractive to birds, but strangely enough, with the exception of a few Piping Crows and one or two stray examples of *Zosterops gouldi* and *Acanthiza chrysorrhoa* we saw absolutely nothing, in fact the lack of bird-life in this district was truly extraordinary and most disappointing.

At the entrance to the King's Park there is a celebrated avenue of cultivated eucalyptus trees which, at the time of my visit, were mostly flowering well, though I was informed that they were not nearly so fine as they had been the year before. The flowers vary in shade from white to the most brilliant scarlet and are extremely beautiful.

#### A TRIP TO THE GOLDFIELDS.

I was told that *the* thing for every visitor to W. A. to do was to pay a visit to the goldfields at Kalgoorlie, which is situated some four hundred miles inland from Perth. I asked what there was to be got there in the way of live animals and learned that it was a barren dry land where no vegetation grew and where animal life was therefore practically non-existent. This was not encouraging, but another informant told me that he had known of several living examples of the Alexandra Parrakeet which had come from that neighbourhood. This seemed more encouraging and I was anxious to go in search of the lovely *Spathopterus*, and at the same time to study the working of gold mines. Mr. E. A. Le Souëf was anxious to go too as, although he had lived for years in W. A. he had never been inland to "the fields," consequently we made arrangements to catch the evening mail train the following day.

Kalgoorlie is situated about four hundred miles inland from Perth. In 1894 some prospectors discovered gold there, and the news was a signal for people to flock thither from almost all parts of the world. The place was then nothing but a barren desert with practically no rainfall, and the only water that could be procured was obtained by condensation from some salt lakes in the neighbourhood. Condensing plant was erected and the water sold at £6 per thousand gallons. There was no proper road, and the seekers after the precious metal had to travel thither as best they could, and many never reached their destination.

In the few years that have elapsed since those days most wonderful changes have been made. Kalgoorlie is now a fine city of 30,000 inhabitants, with good hotels, a splendid electric tram service, a telephone system far superior to that in any ordinary English town, a most elaborate race-course—the Australian cannot exist without horse-racing—and an excellent train service and water supply. Moreover the gold mines are worked with the most modern and expensive plant procurable. The water supply is worth especial mention. As I just remarked the only fresh water to be had in the first years of Kalgoorlie's existence was condensed, the average annual rainfall of the district being less than six inches. Thanks to the energy of the late Premier, Sir John Forrest, whose name will always be held in high esteem in Western Australia, an elaborate water scheme was inaugurated by which water is now pumped for a distance of 352 miles through a wrought iron pipe, eight pumping stations being employed; and thus an abundant supply of good water is available in the town. But this is not aviculture!

We made enquiries as to what birds were to be seen in captivity and discovered quite a number of bird-fanciers, but the ubiquitous Canary seemed to be first favourite. Several people also kept Budgerigars, but no one seemed to be able to breed them. Cockatiels, some of which were excellent talkers, and Yellow-Collared Parrakeets, called locally "Twenty-Eights," were also kept. We discovered one lovely specimen of the Alexandra Parrakeet (which by the way is now in the Parrot-house at the Zoo), and learned that some three years ago these

beautiful Parrakeets visited the district in some numbers, and many were captured. Everybody seemed to know the bird quite well, but unfortunately almost all those which had been caged had died, probably through their owners knowing nothing of the correct method of treating them.

Except for a few Swallows (*Hirundo neoxena*) and White-Eyes (*Zosterops gouldi*) and an occasional Kestrel (*Cerchneis cenchroides*) wild birds were conspicuous by their absence.

The following day was spent in inspecting the gold mines and studying the process by which the gold is obtained, and in the evening we boarded the train on our return to Perth.

On arrival at the Perth Zoo the following morning we were met by Mr. L. Le Souëf, who suggested that we should spend the night at Monger's lake, a broad expanse of water to the north of Perth, which is frequented by waterfowl innumerable, and that with the aid of long nets, we should endeavour to capture living specimens. The idea pleased me immensely, and in the late afternoon Mr. L. Le Souëf and I proceeded to the lake; laying in, on our way, a stock of provisions for our supper.

On arrival at the water's edge I was charmed with the notes of the Long-billed Reed Warbler (*Acrocephalus longirostris*), one of the most beautiful songsters in Australia, many of its notes much resembling those of our Nightingale. Its song was continued from time to time during the greater part of the night. We rowed to the further end of the lake where there are extensive reed-beds, on our way putting up numbers of "Mountain Duck," as the Australian Sheldrake (*Casarca tadornoides*) is there termed, and several other species. The beautiful "Blue Bald Coot" (*Porphyrio bellus*) was common along the lake side, and numbers of Cormorants fished in the lake. Solitary specimens of the Musk Duck (*Biziura lobata*) were frequently seen. They are great divers, rarely if ever flying.

On approaching the reeds we put up numbers of duck of several species. Mountain Duck, Black Duck and White-eyes or Hardheads (*Nyroca australis*) being conspicuous, as well as any number of Slags. Dabchicks (*Podiceps novæ-hollandiæ*) were numerous, and the reed-beds seemed to contain any number of Little Crakes (*Porzana palustris*) whose plaintive notes were

heard on every side. One stood quite still, not more than ten yards from our boat, and gave me an excellent view through my field glasses.

My companion and an assistant from the Perth Zoo set the long nets we had brought with us, in the water round the clumps of reeds, and then we proceeded to set some wire rat-traps baited with pieces of cray-fish for the fine carnivorous Yellow-bellied Water Rat which is quite common in the banks of most of the lakes and rivers of Australia. Having done this we rowed back to the landing place, where we met Mr. E. A. Le Souëf and proceeded to discuss our supper in the boatman's shanty, surrounded on all sides by the chirping and booming of frogs innumerable, while the mosquitoes gave us no peace. After supper we rowed by moonlight to inspect the nets before turning in, but nothing had been caught. We slept soundly that night, curled up in our rugs on the sandy margin of the lake.

Early the next morning we rose, made some tea in a billy-can and then proceeded to inspect our nets. We were not altogether unsuccessful, capturing two Pied Cormorants (*Phalacrocorax hypoleucus*) and two Musk Ducks, as well as a Yellow-bellied Water Rat.

As we rowed amongst the reeds a Black Swan rose from the water quite close to us, with loud flappings of its pinions on the water. Ducks rose from all around us, while a White-winged Butcher-bird piped its flute-like notes from a branch of a lead gum tree by the water's edge, waiting for his breakfast to turn up in the form of some unsuspecting White-eye or other small bird.

(To be continued).

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## NOTICES OF NEW BOOKS, ETC.

### HOW TO ATTRACT AND PROTECT WILD BIRDS.\*

Such is the title of a small book which has been widely circulated in Germany and, within a few weeks, will be published

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*How to Attract and Protect Wild Birds*, by MARTIN HIESEMANN, translated by  
W. BUCHHEIN, with an Introduction by Her Grace the DUCHESS OF BEDFORD,  
London: WITHERBY & Co., 326, High Holborn. Price 1/6.

in English. It describes fully the methods which have been adopted by Baron von Berlepsch, who has spent many years in studying the habits of birds, especially those which are of distinct utility to man, with a view to protecting them and inducing them to live and propagate in his neighbourhood.

Baron von Berlepsch has long seen that the chief cause of the undoubted diminution in many species of birds lies in the destruction of their natural homes. The cutting down of woods and forests, the reclaiming of marsh lands and the progress of bricks and mortar. It stands to reason that if there are very few nesting sites that very few birds can occupy them and hence the birds must become scarce. This fact led the Baron to supply artificial nesting sites in the form of hollow logs designed after the pattern of the Woodpecker's nest-hole. These artificial nesting logs are now manufactured extensively in Germany and are largely used. Besides these the Baron has planted numbers of special shelter-woods, consisting of the kinds of trees and shrubs most appreciated by nesting birds. Such subjects as the feeding of birds in winter, food houses and food trees are fully described.

There is no doubt that Baron von Berlepsch has adopted the very best means to serve the cause of bird protection, and that his methods have been crowned with success is abundantly proved as the following extract from the book under notice will show :—

“The author was able to convince himself that 90 per cent. of the 2,000 boxes in the Wood at Kammerforst (part of the Seebach experimental station, and nearly all of the 500 at Seebach, and of the 2,100 near Cassel, were occupied by various species. The Prussian Board of Agriculture has caused various experiments to be made with these boxes, with excellent results, as published documents affirm.

“Of the 9,300 boxes hung up by the Government in the State and Communal Woods of the Grand Duchy of Hesse, 70-80 per cent. were used the first year, and all have been inhabited this year (1907).

“The Hainich Wood, south of Eisenach, which covers several square miles, was stripped entirely bare in the spring of 1905 by *larvæ* of a little moth (*Tortrix viridana*). The Wood of



Baron von Berlepsch, in which there had long been nesting-boxes, of which there are now more than 2,000, was untouched. It actually stood out among the remaining woods like a green oasis."

Those interested in the subject of bird protection, and we think there are few amongst our members who are not, should certainly peruse this little book.

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#### THE ZOOLOGICAL GARDENS OF EUROPE.

A special Report, by Captain Stanley S. Flower, the Director of the Zoological Gardens, at Giza, Egypt, deals with the various Zoological Gardens of Europe in a very useful manner.

In 1905 Captain Flower visited Europe in order to acquire information for the benefit of the Egyptian Zoological Gardens, and in May of the following year a "Report on a Mission to Europe, 1905," appeared.

In 1907, Captain Flower again visited Europe and spent much time at the various Zoological Gardens, with the result that he has been able to supplement his former Report and to issue one that cannot fail to be most useful to those who are interested in the acclimatization of wild animals. The Report deals with no less than twenty-one Zoological collections, both public and private, eight Aquariums and seven Museums. A list of all the living Antelopes seen in Europe is added, as well as a list of those in the Giza Gardens. Zoologists owe Captain Flower a debt of gratitude for his useful publication.

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#### OFFICERS FOR THE YEAR 1908-9.

In accordance with Rule 9 the Council recommend that Captain SHELLEY and the Rev. F. L. BLATHWAYT retire from the Council by seniority, and that Mr. C. BARNBY SMITH and Mr. ALBERT PAM be elected in their place, also that Mr. W. L. HORTON be appointed as scrutineer and Mr. ARTHUR GILL as auditor.

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#### THE SOCIETY'S MEDAL.

In the present number Mr. Brook records the successful rearing of young of the White-eyebrowed Wood-Swallow (*Artamus leucorhynchus*) in his aviaries; Mr. C. Barnby Smith records similar success with the Partridge Tinamou (*Nothoprocta perdic*

*caria*), and Mrs. Williams with the Brown-throated Conure (*Conurus æruginosus*). These appear to be the first cases on record of these species having bred in captivity in the United Kingdom, and it is proposed to award a medal to each of the above members. If any member or reader should however know of a previous instance it is requested that the Honorary Secretary may be immediately informed.

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## CORRESPONDENCE.

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### CURIOUS NESTING ARRANGEMENTS.

SIR,—The following curious nesting arrangements happened in my garden this Spring, and I think they are worth recording.

A Pied Wagtail had a nest containing three eggs in some ivy just outside my dining-room window. I was surprised one day to see a Robin come from the ivy near the Wagtail's nest, so I examined the nest and found it contained three Wagtails' and three Robins' eggs; I never saw the Wagtails in the garden again, but the Robin sat and hatched two Wagtail's eggs and two of her own eggs, and reared them successfully, though the Wagtails were ready to fly some days before the Robins.

After they had flown I observed one young Wagtail trying to induce a cock Sparrow to feed it, a fruitless effort! I fancy the Wagtails did not know who their mother was, however they managed to survive all right and I constantly saw them about the garden in company with the young Robins.

The Robin had started to build very early in the season in the site eventually used by the Wagtail, but forsook it and reared her first brood higher up in the ivy, and then, I fancy, came back intending to rear another brood in the spot she had first selected, and finding it already occupied drove the Wagtail out.

H. WORMALD.

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## POST MORTEM EXAMINATIONS.

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BISHOP. (Miss Douglas). The bird died of enteritis. Nasturtium leaves would not cause the disease.

ST. HELENA WAXBILL. (Mrs. Waterhouse). The bird had an apoplectic fit, there being a large clot on the brain.

BLACKBIRD. (Mr. Burton). The bird died of apoplexy.

*Answered by post:*

Lady William Cecil.

Mr. Ogle.

Mrs. Sebright.

Mr. Gurney.

Her Grace the Duchess of Bedford.

ARTHUR GILL, M.R.C.V.S.

### III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

#### NEW MEMBERS.

Miss DORIEN SMITH; Tresco Abbey, Isles of Scilly, Cornwall.  
Mr. MARTIN CUNINGHAM; Goffs Oak House, Cheshnut, Herts.  
Mrs. WALTER THOM; Wirswall Hall, Whitchurch, Salop.  
Mr. G. E. RATTIGAN; Lanarkslea, Cornwall Gardens, S.W.  
Lieut. G. KENNEDY; 4th Gurkha Rifles, Bakloh, Punjab, India.  
Lady BLAKE; 5, Hans Mansions, S.W.  
Dr. R. T. McGEAGH; 23, Breeze Hill, Bootle, Lancs.  
Mr. A. L. KEITH-MURRAY; 1, Chudleigh Villa, Bideford, North Devon.  
Miss AUGUSTA BRUCE; 42, Hill Street, Berkeley Square, London.

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#### CANDIDATES FOR ELECTION.

Mr. FREDERICK FREETH; 35, Vincent Square, Westminster, S.W.  
*Proposed by Mr. ALLEN SILVER.*  
Lady EDITH DOUGLAS PENNANT; Soliam House, Newmarket, Cambs.  
*Proposed by Dr. A. G. BUTLER.*

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#### MEMBERS' SALE AND EXCHANGE COLUMN.

*The charge for private advertisements is SIXPENCE FOR EIGHTEEN WORDS OR LESS, and one penny for every additional three words or less. Advertisements must reach the EDITOR on or before the 26th of the month. The Council reserve the right of refusing any advertisement they may consider undesirable.*

Pair Crested Australian Pigeons, 15/-; pair Cockatiels, 9/-; both have bred in garden aviary.

LEWIS; Corstorphine, Ryde.

Will give hen White-throated Finch to anyone paying carriage.

NICHOLAS O'REILLY; 9, Royal Crescent, Ramsgate.

Cock Pennant Parrakeet, 20/-; cock Red-rump Parrakeet, 15/-; pair Cockatiels, 14/-; cock Pekin Robin, 5/-; cock Grey-headed Love bird, 3/6; nearly Yellow Budgerigar, 7/-; pair Java Sparrows, 5/-; Budgerigars 7/6 pair; all from cold outdoor aviary and perfectly healthy.

R. FRANKLIN-HINDLE; 34, Brunswick Road, Liverpool.

Blue Roller (*Garrula coracioides*) tame, feeds from hand, perfect condition, 30/-; few pairs Waxbills, Avadavats, 3/-, 4/6. *Wanted*—Cock Festive Tanager, Seth-Smith's Parrakeets, fine wired Cage for Waxbills.

ROBBINS; 25, Campden Hill Square, W.

Snowy Owl (*Nyctea scandiaca*) healthy, tame specimen, about four years, £6; also pair hand-reared Spanish Blue Magpies (*Cyanopica cooki*), £5.

W. FROST; 103, Goldhawk Road, London, W.

Six fine hybrids between Adelaide Parrakeet and Rosella, good healthy birds, 25/- each; beetles for breeding mealworms, 1/2 per 100, post free.

C. P. ARTHUR; Melksham, Wilts.

Doves, Violet (or White-fronted), White-winged, Bronze-winged, Passerine, Aurita, White-crowned, Rufous, Necklace, Barbary. Prices on application, or would exchange.

Miss R. ALDERSON; Park House, Worksop.

**JOHN D. HAMLYN,**  
**NATURALIST,**

**221, St. George's Street East, London.**

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## THE JOURNAL OF THE AVICULTURAL SOCIETY.

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LONDON :

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NOTE.—A new volume commences every November.

## II.

### All Subscriptions

should be sent to the Honorary Business Secretary.

### THE AVICULTURAL SOCIETY.



Persons wishing to join the AVICULTURAL SOCIETY are requested to communicate with either of the Hon. Secretaries or the Editor.

#### NOTICES TO MEMBERS.

The Subscription to the Avicultural Society is 10/- per annum, due on the 1st of November in each year, and is payable in advance. The entrance fee is 10/6. The *Avicultural Magazine* is sent free to members monthly. Members joining at any time during the year are entitled to the back numbers for the current year, on the payment of entrance fee and subscription.

All MSS. for publication in the Magazine, Books for Review, and Private Advertisements should be addressed to the Editor, Mr. D. SETH-SMITH, 14, Canning Road, Addiscombe, Surrey.

All Queries respecting Birds (except *post mortem* cases) should be addressed to the Honorary Correspondence Secretary, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent.

All other correspondence, and Subscriptions, should be sent to the Honorary Business Secretary, Mr. T. H. NEWMAN, Newlands, Harrowdene Road, Wembley, Middlesex. Any change of address should be at once notified to him.

Advice is given, *by post*, by members of the Council to members of the Society, upon all subjects connected with Foreign and British birds. All queries are to be addressed to the Hon. Correspondence Secretary and should contain a penny stamp. Those marked "Private" will not be published.

The Magazine is published by Mr. R. H. PORTER (7, Princes Street, Cavendish Square, W.) to whom all orders for extra copies, back numbers, and bound volumes (accompanied by remittance) should be addressed.

Cases for binding Vol. IV., New Series, of the Magazine (in art cloth, with gold block on side) can be obtained from the Publisher, post free and carefully packed, at 1/6 each; or the Publisher will undertake the binding of the Volume for 2/6, plus 8d. for packing and postage. All orders must be accompanied by a remittance in full; and members are requested to state whether they want the wrappers and advertisements bound in at the end or not.

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(Continued on page iii. of cover).





H Goodchild, del. et lith

Huth, imp.

BLACK-CHEEKED LOVE BIRD.

*Agapornis nigrigenis.*

From living specimens in Mr Herbert D. Astley's collection.



# Avicultural Magazine,

BEING THE JOURNAL OF THE  
AVICULTURAL SOCIETY.

New Series—VOL. VI.—No. 12.—All rights reserved.

OCTOBER, 1908.

## THE BLACK-CHEEKED LOVEBIRD.

*Agapornis nigrigenis.*

It seems to me that some of our Museum friends, who bestow upon our birds their high faluting titles, are sometimes colour-blind.

The beautiful Love-bird which is figured in this number is no more *black*-cheeked than I am !

The cheeks are a *very* deep brown, perhaps the colour of the woodwork in an old Swiss Châlet, but most certainly not black.

The forehead and crown of the head is dark maroon-chestnut, and the cheeks may be described as a deep and burnt addition of that, just as old oak is deeper than newer wood.

The female is to be distinguished from the male by her lighter-coloured eye,\* her smaller head, and her less brilliant colouring, more especially in the frontal patch of apricot ; but one must look closely to see the differences.

I have had no chance of breeding these birds, because I have kept them in a small cage for the benefit of the Society ! A very noble sacrifice on my part ! The artist could not have very well painted their picture, had I not done so. However it is a pleasure to know that one of our most enthusiastic and painstaking members has successfully bred them.

I believe that Mr. Phillipps and I are as yet the only possessors of these beautiful little parrots. To him I leave the reading of the second lesson.

HUBERT D. ASTLEY.

\* See Mr. Phillipps' notes on the colour of the eyes, p. 320.—ED.

## BREEDING OF THE BLACK-CHEEKED LOVEBIRD.

*Agapornis nigrigenis*. W. L. Sclater.

*Bulletin B.O.C.* XVI., p. 61 (1906);

*Avic. Mag.* N.S., VI., p. 206.

By REGINALD PHILLIPPS.

In May last, I introduced to our readers three examples of this rare and little-known species, and referred to two others that I had seen. Shortly afterwards, two more arrived; and I learnt that all the seven, although not "made in Germany," reached London through that country. These latter, which likewise I saw, were doubtless a pair: they differed from one another in sundry small ways—but then they appeared to be of different ages. To be able to sex a bird at sight is of the first importance to aviculturists; so we may well, for a moment, consider the question of the sex of the Black-cheeked Lovebird.

These seven birds, or some of them, although generally alike (I am here, of necessity, speaking chiefly of those differences which may be observed without handling the bird), differed slightly from one another in the shading of various parts of their plumage. If they could be divided by these differences into two, and only two, groups, one might feel justified in saying that the differences are sexual; but I am not satisfied that they could be so divided, even if it were possible to bring the birds together and compare them with one another side by side. Nevertheless, *some* of the differences may betoken a difference of sex.

The male and female of the adult Madagascar Lovebird (*A. cana*) conspicuously differ from each other. Roughly speaking, the differences lie in the region of the head and in the under wing-coverts. Then we have the Red-faced Lovebird (*A. pullaria*); here again the sexes differ, at any rate after the first moult; and the differences are found in the face, the under wing-coverts, and in the metacarpal edge. *The British Museum Catalogue of Birds* (XX., pp. 506 and 509) tells us that the adult Abyssinian Lovebird (*A. taranta*) also differs, and again in the region of the face and in the under wing-coverts. On the other hand, it is often practically impossible to be sure of the sex of a couple of the Rosy-faced birds (*A. roseicollis*). The sexes of the

other three species (*A. fischeri*, *personata*, and *swindereniana*) mentioned in the Catalogue are, or were when vol. XX was published, supposed to be alike; and I understand that the same may be said of *A. lilianæ*. Concerning *A. zenkeri* (Handlist II., p. 35), I am without information. It might appear, therefore, that, if any apparent differences in plumage between the sexes of the subject under consideration do exist, we might expect to find them somewhere in the region of the face or of the under wing-coverts.

As regards the under wing-coverts, I think we had better withhold judgment for the present. Further examinations are needed.

But possibly the metacarpal edge may help us—yellow in the male and green in the female. My birds are flying about and nesting, and cannot be closely inspected; and my eyes are old; so I must leave it to others to look into this and other points.

The shading and extent of the colours which occupy the upper part of the head, from the cere to the hind-neck, and also the sides of the face, are elusive and aggravating. It is comparatively easy, when one has a couple or a series of skins, to lay them out on a table side by side, in a good light, and make remarks and draw conclusions, but try it with living examples, not seen together perhaps, in any or no light, bobbing up and down and turning hither and thither! Moreover, in the Black-cheeked Lovebird, the shades of colour in this region differ according to the light, and according to the angle at which one sees them. I was much struck, one day, while looking down at the nestlings from above—in a poor light. The elder two turned restive, and stretched their heads up towards the opening at the side-top of their domed nest, as if meditating a bolt. The sinciput of one seemed to be of a deep blackish colour, of the other not blackish but brown. Assuming that the one was some two days older than the other, yet the extra two days' development of feathers which for over a week had seemed to be fully grown would hardly be sufficient of itself to account for the difference. When these two appeared as fledgelings in the aviary, the difference in colouring was almost imperceptible—but I take them to be male and female, so perhaps there is something in it, and that

the colouring of this region may be different in the sexes; but whether the differences are sufficient to enable one to sex an odd bird at sight is another matter.

When my male is sitting in the garden side by side with the odd female, on examining them through a binocular, I observe that the blackish of the cheeks, as it extends upwards, appears to be more profuse behind the eye in the male than in the female; but when the comparison is made with the old female under precisely similar circumstances—and I have examined the three over and over again as now the one couple now the other sit on their favourite perch—although the difference exists, it is much less apparent. As regards age, the male (see my notes on the three birds which appeared in May—after rectification of sexes, as stated below) is supposed to be intermediate between the two females. Therefore, if our premises are correct, the blackish behind the eye is the more profuse in the old than in the young female, and more profuse in the grown up male (? at what age) than in the female at any age. In the fledgelings, the dark colouring behind the eye is at first almost non-existent.

But have we not something pretty sure to go upon in the colour of the eye? I have three more or less adult examples, two of which have the dark yellow-brown eyes I mentioned in May, the other the pale yellow-brown eye—and the two dark-eyed birds have now proved themselves to be of the same, and the pale-eyed of the opposite, sex.

I am told that the two of the first five which I did not retain also have different coloured eyes, and that they are a pair.

The last two arrivals, almost certainly a pair, were in a show cage when I saw them; they were crouching down, quite mute, side by side on the bottom of the cage, but their upper parts were well displayed, and the difference in the colouring of the eyes at once attracted attention. *But it was the pale-eyed bird which appeared to be the male*, whereas, in May, it was my pale-eyed bird which I described as the female, and the other two as males:—I have since ascertained that the “Immature male” of p. 209 has the dark eye.

Facts are stubborn things. Little by little it dawned upon me that I had mistaken the sexes of my birds; stubborn facts

stared me in the face, and became more and more stubborn as nests were built, eggs laid, and young birds made their appearance. My pale-eyed bird is the male, the two dark-eyed are females; and I must ask our readers to alter "male" to "female," and *vice versa*, in their copies of my previous account of the Black-cheeked Lovebird so far as the references are to my own birds.

It seems to me that the evidence points rather strongly to there being a sexual difference in the colour of the iris, that of the adult male being of a perceptibly lighter shade than that of the female. The eyes of the nestlings, as far as I was able to make anything of them, were black, or at any rate very dark.

Speaking of parrots generally, in those species which indicate the sex by the colour of the eye, is it not usually the young and the female that have the darker eye? If so, the Black-cheeked Lovebird appears to follow this rule.

The story of my odd female—the "Immature male" of page 209—is of some interest, and may be brought in here.

When the birds, the original five, were unexpectedly dumped down before me, they were still in the dark travelling cage in which they had just arrived from Germany. Four of them were on a perch at the back, the fifth on the bottom of the cage. Of the four on the perch, three, directly they were uncovered, commenced to shriek, and flick their tails, and gesticulate like mad creatures, each one encouraging and inciting its companions ever to greater and more strenuous efforts towards uproar and confusion: in my innocent and chivalrous heart, I supposed that they *must* be males. Alas! I now know that they were yelling out "Votes for women!" The fourth, sandwiched in between the shrieking three and the side of the box, had been horribly mangled by its companions, and was in a bad way. I concluded that it would have been thus maltreated by those of its own sex, and consequently that it too *must* be a male. Alas, once more; I had forgotten the *tricoteuses* of '92 over the way, and the scenes that were going on less than one hundred years ago in the neighbourhood of Parliament Square, and elsewhere, revealing to us how unlovely woman can be when she is not true to herself. So I will not offer any apology for having reversed

the sexes last May, and called the males "females," and the females "males"; though I feel that one is due to my own male, for he it was that, ashamed of the company in which he found himself, was sitting silent and undemonstrative on the floor of the cage, and upon whom I immediately pounced, under the idea that probably I had secured the only female out of the lot. In this dark cage, by the way, I could not see the eyes, and, not suspecting a difference, did not look for one.

I had the injured bird placed in a separate cage, to give it a chance for its life. A few days later, it was offered to me again, at half price; and I accepted it, more out of pity than for any other reason; and I am very glad that I did so.

I dressed the poor creature's wounds, which were very serious, only when absolutely obliged to, for it was impossible to handle it without giving it acute pain, and, worse still, its agony of nervous terror when taken up worked more mischief than continuous dressings would have done good. Slowly and lingeringly it faded away, until for two or three days it was seemingly lifeless; and on one occasion I actually put my hand into the cage for the purpose of removing the dead body—when a slight flicker of an eyelid restrained me. A day or so later, the sun began to shine; and I placed the cage in the sun. The genial warmth of the sun seemed to arouse the invalid from its deadly lethargy, and to give it hope and a desire to live, and from that day it steadily improved. She—no longer an "it"—has since not only been flying about the aviary, strong on the wing but taking a perch—and only the thick ones—with difficulty, but has built a nest, and is now sitting steadily, though perhaps on unfertile eggs. Having lost not less than three toes, and with one leg permanently crippled, she is unable to get in and out of a log, and has built the nest—not a small one, judging by the amount of material carried—on a hidden-away shelf. The amount of litter dropped daily from the nest while it was in building spoke eloquently of the difficulty she experienced in getting the stuff into position, and of her industry and perseverance.

While the other female was sitting, the cripple sought out and secured, in spite of many a rebuff, a good deal of the company of the male; the latter had no affection for her, but he was

lonely and had nothing to do, and had a certain amount of fellow feeling for her in her loneliness; and, as far as I could observe, he helped her considerably in the by no means light task (a most serious one for a cripple) of hewing and carrying "timber" for the building of her house. It is especially noteworthy that he seemed to assist only in the cutting and carrying of the sticks, and left her to attend to the more simple work of collecting spray stalks, hay, and the like. I fear that it will not be possible to inspect the interior of this nest without damaging the structure. Moreover, it is in the garden, so that I could not go near it without being seen. The probability is that nothing will come of this nest, but there is no knowing; and if she should have but one young one to cheer up and encourage her lonely heart I should be exceedingly pleased, for she used often to look so piteously forlorn.

From the foregoing experience, I think we may regard the Black-cheeked Lovebird as a good liver and tenacious of life—but it perceptibly shrinks from cold. It delights in the warmth of the sun, but betrays in many little ways its love for the gloom and solitude of the forest—but of the *warm* forest.

The presence of this odd bird has shewn me, which needed no shewing, that this species is gregarious, but that each pair keep strictly to their own nest; and also that no female will permit another to build too near to her own retreat. While the females are sitting, doubtless the males, with any odd birds, feed and fly off to water together. Probably they pair for life.

At times they are rather noisy; and their calls and cries are perhaps less musical than is the case with either of the other three species that have been brought to this country. But they can be singularly quiet when quite at peace. After the four young had left the nest, I repeatedly noticed the family party of five or six playing or feeding together, hour after hour, without uttering a sound beyond some soft low chattering.

The nervousness which was displayed by my three birds for some time after their arrival seems quite to have passed away, and they now appear trustful and confiding so long as I keep entirely away from the vicinity of the nest. If I am caught in the birdroom, I am regarded with grave suspicion. Their natur-

ally shy nature still asserts itself in certain little ways, such as their refusal to stay on or go to the ground should any one be present, or to remain on even the highest perch should any one endeavour to go beneath them. More than once, when rushing out with long stick or hand-net to drive in a youngster from cold or wet, the male would invariably keep to the side of the nestling utterly ignoring my wild gesticulations and brandishing of fearsome weapons—he had long since found out that I didn't matter.

Several birds, some very small, live in the aviary with them, but not one has been hurt, for there is a sufficiency of space; though in a small place there might be danger; but they were never vicious and spiteful like the Madagascar species. They seem to be honest, straightforward, good-hearted fellows—and especially were they *straightforward*, for when they used to go for a bird they would go for him very straight indeed, with mouth wide open, and without any misleading hesitation or sentimental indecision whatever. But this phase likewise seems to have passed away with their nervousness; probably enough, both had origin in the same cause.

In 1896, I wrote two papers on the Lovebirds (O.S. II., pp. 49 and 128)—the true Lovebirds of the genus *Agapornis*—which, notwithstanding one or two blemishes, fairly described the peculiar nesting habits of the Lovebirds so far as they were known, and to them I refer those of our readers who are unacquainted with the private life of these little creatures, so insipid and uninteresting when kept in tiny prisons, as at the Zoo. for instance, so full of quaint interest when free in a large place. Protection from the weather is imperative (*A. cana* may be a possible exception, but I doubt it), but, during the warmer months, free access to the open air, especially to a well-wooded natural aviary, is of the first importance if their natural habits are to be brought out.

To the account above referred to I may add that ten species of Lovebirds (*Agapornis*) are now known to scientists, of which living examples of only four have found their way to this country; a recent report that the Masked Lovebird, *A. personata*, had arrived was unfounded.

Since I wrote in 1896, the Red-faced Lovebird has nested



here and in a few other instances, but probably the young that have been fully reared in this country may be numbered on the fingers of one hand. My Red-faced Lovebirds made but very poor and scanty nests; they were never seen while carrying materials, so I am unable to say how they conveyed to their log the very little that was there. This species is sadly handicapped by having had its wings cut before it reaches our shores, by the tainted and often diseased condition (due to overcrowding) in which it generally arrives, and too often by the injudicious treatment to which it is occasionally subjected after arrival:—it was “Trade” one dealer was at pains to explain to me; but a trade custom which, for the sake of expediting their sale, injures the birds is of questionable morality and a short-sighted policy. A thoroughly sound healthy pair of Red-faced Lovebirds, *strong on the wing and with the muscles, &c., of the wing unstrained*, is a possession to be proud of, a fact which wonderfully few people are aware of, and last of all judges at the Bird Shows and certain other “authorities.”

The Rosy-faced Lovebird may be bred rather easily. For an account of its nesting, and mode of carrying materials, see the *Avicultural Magazine* for July, 1896. The difficulty with this species is to obtain a true pair.

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Let us now turn to the nesting of my Black-cheeked Lovebirds. Their surroundings here are artificial, not as I should wish them to be, for other birds have possession of my best summer aviary; so the following must be taken as an account of the breeding of these individual birds in a particular place, not necessarily as a typical case of the species.

These two birds came into my hands on the ninth day of the month of fools—happily April 1st had been safely tided over before they arrived—and were placed in a small cage in my dining-room. They shed a few feathers, and seemed to be just finishing off their moult. On the 25th, I noticed that both of them were passing bits of spray millet sideways backwards and forwards between their mandibles. I knew well what that meant, and immediately transferred them to a rather large box cage, in a screened corner of which I placed a nesting-log, and supplied

materials of various kinds. They at once took to the log, both sleeping in it at night, and both occasionally carrying materials into it in their beaks. While the female was in the log, which was not of infrequent occurrence, the male would sit outside and "sing." From time to time the male would regurgitate food, which at first he did with so much difficulty (being probably a rather young bird) I really feared that something might be stuck in his throat. This action was accompanied by a curious low noise, a sort of *kuck, kuck, kick*, which doubtless was a call to the female in the log, for she would promptly come out and seat herself by his side, and partake of food from his mouth in the usual manner. Another very similar note is *cook, cook*, frequently repeated in a low voice. It was uttered by one of the parents, in the company of its mate and young ones, and seemed to be an invitation to the mate to come and examine into the merits and demerits of a possible new nesting-site. As far as I was able to observe, all their love-passages, even in the aviary, take place in the open. They favour a particular part of a particular perch, from which, curiously enough, they cannot see even the entrance to the bird-room much less keep an eye on the nest; they like to feed in one particular spot, which, too, has the disadvantage—to our minds—of being actually as far removed from, and as completely out of sight of, the nest as the limits of the aviary will permit; and in many ways they betray their likings for particular localities. In the wild state, doubtless they keep much to that part of the forest to which they have been accustomed from their fledgeling state; while their rapid flight would enable them to go off for water to their favourite Mugnazi river, and return to their homes, in a very short space of time. *Mais à nos perroquets*:—no eggs were laid in this cage. The log was fairly well concealed, but not sufficiently so for them. By their occasional fits of dashing and banging about, they plainly shewed that they had a soul above such straitened quarters; and so, on May 26, they were transferred to the birdroom, where, having repelled and utterly routed my old male Varied Lorikeet (N.S. I., p. 287), who resented their intrusion and continues to resent their masterfulness, they quickly settled down. The window of the birdroom opens into that part of the garden aviary in which trees do not live, thanks

to its occupants; the principal dead tree is a common black poplar; and, fastened up against the outside wall of the house, are several birch brooms, which really were new once, although one might hardly believe it from their present appearance.

During the first half of June, these two birds, but especially and for a longer period the female, were constantly attacking the dead poplar. Their desire, of course, was to chip off little strips of bark, after the manner of the Rosy-faced Lovebird, but, as there was not any bark, they had to put up with little strips, or lengthened chips, of the wood itself, which they passed sideways backwards and forwards between their mandibles, for the purpose of making them soft and supple. But not once did I notice any attempt to fix material among the feathers: they invariably carried in the beak. It is likely enough that, if they had had access to living trees, they would have carried strips of bark amongst the feathers of the lower back and upper tail-coverts, after the orthodox fashion. They also, but principally the female, carried hay, stalks of wheat, spray millet stalks, and sticks. Most of the latter were cut (gnawed) from the birch brooms \* fastened against the house, but some were picked up off the ground.

The female took to her nest on June 20—probably the first egg was laid that day. On the 23rd, noticing the female in the garden with the male, I slipped into the birdroom, lifted down the log, and found two eggs in quite a substantial nest. The eggs,

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\* A curious little episode occurred in connection with this wood-cutting. A pair of Cuba Finches, *Phonipara canora*, built a nest in one of the brooms. Then came the Lovebirds and carried off a large part of the broom, leaving the nest very much exposed, and frightening away the tiny Cubas. A little later, however, mother Cuba was sitting on this nest, when, one morning, I found that it had been partially destroyed by a female Pied Rock-Thrush, and the female herself injured, besides the whole of her tail being pulled out. The nest had been very much dragged about, but I found two eggs still in it, each hidden away separately in a tiny pocket—not by accident, I think. I shut up the Thrush, the only evil-minded bird of this species I have ever possessed: and the plucky little Cuba returned to her nest—but, after two or three days, deserted it as I thought. I saw the male carrying a little hay, and the female slept in or near the nest at night; but I never imagined that anything was going on, for the female had not recovered from the Thrush's attack, and the male also had had a nasty peck. I heard the funny *si-si-st-si* of the baby Cuba; but this cry is a difficult one to locate, and I connected it with some nesting Cubas in the adjoining aviary. On September 2, very much to my surprise, I found two sturdy fledgeling Cubas in the aviary, which are being carefully fed and attended to by the father. They are often to be seen in the dead poplar with the Lovebirds, and no attempt has been made to injure them.—R.P.

of course white, were of a much elongated pear shape, and, in this respect, different from those of either *cana*, *pullaria*, or *roseicollis*:—but the shape may be an idiosyncrasy of this particular female and not a typical one of the species. The eggs of the other Lovebirds in my collection are roughly as follows:—The Madagascar Lovebird, one specimen, an ordinary oval egg, but with the two ends practically equal in thickness; the Red-faced, ten specimens, larger, a few ordinary oval, but most of them of a thick, bulky, roundish oval; the Rosy-faced, ten specimens, of the same character as the last named but larger. The eggs of the Black-cheeked Lovebird were, I should suppose, a little larger than those of the Madagascar species; probably they were laid on alternate days.

The nest is in an ordinary trade nesting-log, externally twelve inches high without the top, which I had removed. It is placed upright, and reaches to the roof, at the back, of the “house” inside which it is placed; but, as the roof is a sloping one, there is just sufficient space to allow of a bird to creep in at the open top; there is also the usual aperture high up on the side of the log. The diameter of the circular inside of the log, measured across the mouth, is just about  $5\frac{1}{4}$  inches.

When I peeped into the log on June 23, I found a substantial but quite open nest. Immediately below the side aperture, and reaching up to it, there were a few upright sticks. As I supposed at the time, and have since found to be actually the case, one of the motives, doubtless the primary one, for the placing of these sticks in this singular position was that they might serve as a ladder to enable the sitting female to climb quickly out, so as to be ready for immediate flight on the approach of danger; for the inside of these old-fashioned logs which have been hollowed out with a lathe is very hard and smooth, and offers no aids to climbing; and so to enable her to get in gently, and to escape rapidly, some assistance was needed. At one time I supposed that the sticks were placed in the log for the purpose of making the circumference smaller, but this is unlikely. In addition to the sticks, there were stalks of various kinds, some spray millet, a little hay, and a good collection of chewed chip-pings, which seemed to form a sufficiently comfortable nest—and probably a sanitary one.

After peeping into the log, I replaced it, or tried to do so, exactly as it had been before; but some subtle instinct seems to have warned the female that Peeping Tom had been prying, for, with almost frantic energy, she recommenced carrying materials, one of the objects being to stop up the side aperture, and thus, according to her lights, absolutely conceal the nest—for what creature in the whole wide world but a Lovebird, and that Lovebird a *Nigrigenis*, could possibly imagine that any ingress to a nest could by any possibility be obtained by that tiny chink at the top of the log, in that dark corner, so entirely hidden away by the overhanging eaves of the “house” which she had with such cunning and foresight selected as a cradle for her offspring! By the 26th, in addition to other important affairs of which I had not the faintest suspicion, the work of building up the aperture on the inside was completed; and, as a display of triumphant superiority and decorative ingenuity, the whole was finished off by the fixing in the aperture the stalk end of a long and practically untouched spray of millet, which was to be seen (for a few days only, as other birds came to feed on the millet and dragged down the spray) dangling down from the aperture outside, so that all the world and his wife might see that really there was nothing there. At this time, the amount of stuff which was carried from the garden to the birdroom by the female was quite considerable; on the 25th, she had hold of a curved stick nearly as thick as my little finger and about a foot long which, owing to its bow-shape, gave her much trouble; for some minutes she strove with its contrariness in vain, dropping it more than once, but, undaunted, she persevered and eventually succeeded in carrying it to the birdroom: if that does not mean broken eggs, I thought, well —! In all her work, the female was encouraged and aided by the male, but chiefly out-of-doors, for the male rarely went into the birdroom during the day.

(To be continued).

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## A COLLECTION OF RARE BIRDS FROM NEW GUINEA.

By HUBERT D. ASTLEY, M.A.

It was a great privilege, through the kindness of Mr. and Mrs. Johnstone, who invited me to see the beautiful collection that Mr. Goodfellow brought back at the beginning of September, to be able to examine closely such rarities ; and a privilege also to be asked to write a description of these lovely birds.

Few there are, one cannot but believe, who would be able to bring back to England from the mountainous districts of far off New Guinea, in such splendid health and condition as Mr. Goodfellow has done.

The terrible difficulty of transport through pathless forests, of keeping up the supply of suitable food, and furthermore of feeding wild-caught birds even if the food is at hand ; the keeping of many treasures upon board-ship, the varieties of climates through which they must pass, the heat of the Red Sea, the fall of the temperature in the Mediterranean ; and finally, may be, the boisterous waves of the Bay, to be capped by the dampness and changeability of poor old England, all go to make up a task which not many people would care to undertake.

The collection which Mrs. Johnstone has housed includes species of birds that have certainly never been brought to England hitherto, or probably to Europe either. It must be remembered that Mr. Goodfellow has done really hard work to accomplish what he has, spending many weeks in the midst of the melancholy and vast forests, with the odour of rotting wood and damp vegetation around him, and the dreary twilight caused by the giant trees interlaced with a thick net-work of a thousand creepers.

Alone too, except for ignorant natives, who can hardly be described as perfect gentlemen in their habits, natives whose "bonne bouche" at supper time may be, and sometimes are, the brains and other dainty portions of one of their fellow creatures ! Yet much of that is balanced by the intense interest in the beauty of the bird-life around ; beauty that is known, and at times beauty that is unexpected in the appearance and perhaps capture of some new species, some Paradise Birds hitherto undiscovered.

But there is no ruthless destruction, no decimation of the feathered ranks, such as goes on because the women of Europe and America follows the shameful fashion of wearing plumes upon their heads.

Just a few pairs of each species are brought home to be admired in the living flesh by many bird-lovers, and the rest released. Mr. Goodfellow for instance gave liberty to a large quantity of Paradise Birds, because he felt he could not house them properly, or find a home for so many in England. Had he been a plume-trader, where would those birds be now? Certainly not in the forests of New Guinea, but only their skins figuring in a hat in some shop window, perhaps in Regent Street or the Avenue de l'Opera in Paris, to be finally perched upon a mat of artificial curls, which in their turn are stuck upon some head, the brains of which are never troubled (if brains there are!) as to whether their owners are encouraging the slaughter of thousands and thousands of birds, the extinction of species.

The birds in Mrs. Johnstone's new collection number just one hundred.

Some of the species of Paradise Birds have already been landed in this country this summer by Mr. Horsbrugh who has been collecting for Sir William Ingram, but Mr. Goodfellow brought with him two species new to aviculture; THE SUPERB and D'ALBERTI'S PARADISE BIRDS, one male of each kind. Both birds are in immature plumage.

THE SUPERB (*Lophorina superba*) male, when adult, has the body of the colour and texture of the softest black velvet, a large cape of the same, which can be erected over the head, lying on the back; whilst a marvellous gorget pointed outwards on either side of the breast, is of scintillating golden emerald green.

D'ALBERTI'S PARADISE BIRD (*Drepanornis alberti*) is conspicuous for its long and slender arched bill, and for the wonderful double fans covering flanks and thighs; which, glittering with violet and green, can be spread out in the display.

Besides these two treasures, there are the following:—

THE MARCHESE RAGGI'S PARADISE BIRD (*Paradisea raggiana*) of which there are four pairs and a single bird. Can these be *P. intermedia*? I wondered whether the side plumes were of

a bright enough red for *P. raggiana*? Two of these are hand-reared, and one of them was found by Mr. Goodfellow in the form of an egg. The nest was in course of construction, and the whole process was watched, being built quite low down beneath the great trees of the forest, as is apparently the usual habit of these birds, since there are so many birds of prey which would destroy the young ones in more exposed positions.

Only one egg is laid, and two hen birds were captured along with their single young birds, so that although the females of the Paradise Birds are so seldom imported, we are quite certain of their identity in this case.

THE MAGNIFICENT PARADISE BIRD. Nine pairs and a single hen. In the specimens brought by Mr. Goodfellow, it seemed to me, although my remarks must not be taken too seriously, having had little time to examine them closely, that they are not the bird entitled *Diphyllodes magnifica* (which I presume to be the type) but either *D. seleucides* (Lesson's Paradise Bird) or *D. chrysoptera*. Their wings are not orange enough for *D. hunsteini*; which in any case, inhabits a different part of the country.

A very interesting fact with regard to the habits of these birds is that the males select some small tree, from which they strip all the leaves, carrying them away, and permitting no refuse around their playground. On the bared branches the males display and dance, so that all their beauty can be seen. Mr. Goodfellow threw some leaves down upon the space that they had cleared beneath the sapling, and the birds with cries of indignation removed the offending obstacles.

OF LAWES' SIX-PLUMED PARADISE BIRD (*Parotia lawesi*) five pairs and one single male have arrived.

I saw more than one male in full plumage, the racqueted shafts which spring from the sides of the head, lying over the shoulders, the beautiful blue eyes shining conspicuously against the velvety black plumage, and the splendid gorget of golden emerald green as a burnished breastplate.

OF THE MAGNIFICENT RIFLE-BIRD (*Craspedophora magnifica*) there were three pairs, but most unfortunately one female escaped at Burrswood and was lost to sight amongst the oak trees.



Of MANUCODES, three splendid specimens of *Phonygama purpureoviolacea* arrived, as well as a darker coloured Manucode, which might possibly be *Phonygama hunsteini*. These birds when seen in sunshine, are very fine. They scintillate with purple and green iridescence.

Five GARDENER BOWER BIRDS (*Amblyornis subalaris*) were brought, one of which, a male in full plumage with a splendid crown of golden orange, unfortunately died at Genoa through battering itself in its terror at the booming of guns around it in the Port at night. The bird was in the very finest condition, its skin looking as if it had been freshly killed in a wild state.

One of these five is of a different species, a young male and larger, presumably *Amblyornis inornata*. There can be nothing more intensely interesting and marvellous in nature's productions than is the bower and garden of this bird, decorated as it is with a carpet of moss, upon which are arranged bright blossoms of orchid and other flowers, berries, beetles, etc. Often the birds have a taste for two particular colours, such as blue and orange; the primary ones. Mr. Goodfellow caught his Gardeners by this means. Finding that at one of the bowers a certain berry of a bright blue was used as a decoration, he placed in a trap a blue bead which exactly resembled it, and the bird came to fetch it: and in another instance he filched from the mossy carpet a scarlet blossom which lay there, and the bird came down when all was still to take it back! It is pathetic to know that it was captured because it loved to beautify its forest home, and that in evincing such intelligence and æsthetic feeling, it was not intelligent enough to distinguish the cunning means which ended in its loss of liberty. Let us hope that these wonderful birds, as surely will be so, will find a home in some spacious aviary, where all will be supplied to make them contented, and where they will not feel they are "by the waters of Babylon"!

I must not pass away from the subject of the Paradise and Bower Birds without mentioning the skin of a member of the latter family which Mr. Goodfellow showed me. It is *Loria mariæ* (a lady Macgregor's Bower Bird). A bird of the size of the Gardener Bower Bird; the male, a deep velvet black with steel and violet-blue reflections; the female, greenish olive. A

very curious feature in this bird is it's great gape of mouth, the edges of which stand out at the sides in rather the same way as in the case of young birds, such as Starling, etc.: within, the mouth is primrose yellow and the throat pink, looking when opened like the cup of a gloximia. This interesting Bower Bird was found in 1894, (see *Ibis*, 1895, pl. viii. and p. 343), in the Owen Stanley Range.

Of LORIES, Mr. Goodfellow has brought home many individuals in magnificent condition and quite tame, representing three species.

*Charmosyna stellæ*, of which there are five pairs, are *most* beautiful. In size about that of a Rosella Parrakeet, but of much finer build, the gorgeous plumage, which is chiefly of a rich cardinal red and magnolia green, having a gloss on it which could be exceeded by no bird in the wild state. The tail is long and pointed, and slightly curves inwards at the end, being green at the base, and terminating in bright orange-red. The female is distinguished by a patch of brilliant yellow on the lower back, where in the male it is crimson. These Lories would make charming pets, as they do not give vent to the ear-piercing screams which most of the members of the family delight in.

*Charmosynopsis pulchella* of which there are four pairs and two hens is not unlike a miniature edition of *Charmosyna stellæ*. A lovely little bird, *very* little larger in the body than a Budgerigar, but not so long in the tail, which however is very pointed and ends in a beautiful orange colour. It is called the Fair Lory (or Lorikeet). It's head and underparts of a brilliant cardinal red, with narrow streaks of yellow on the breast, a patch of violet-blue at the back of the head, and it's upper parts and wings, rich green; the female can be distinguished by a patch of yellow on the flanks.

Most confiding little jewels are these vividly-coloured birds.

One male of *Hypocharmosyna placens* (The PLEASING LORIKEET) was brought, which made one long for more! It's colour a brilliant and rich green, the cheeks of a beautiful red near the bill, and blue over the ears; red also predominating on the sides beneath the wings; and the bill the same colour.

A great, or rather a little treasure died in the Mediter-

ranean, on the voyage home ; namely *Hypocharmosyna wilhelminæ*, A Lorieet of tiny size, smaller than a Budgerigar, and very dainty in it's plumage of brilliant emerald green with frontal stripes of yellow, and a turquoise blue patch at the back of the head ; a red bill and underwings, a patch of the same colour on the rump, with violet just above the tail. The heat was so great through the Red Sea, and then came chilly winds on the coast of Europe.

Of PARROTS, three splendid specimens of *Aprosmictus callopterus* (The Yellow-wing King Parrot) were safely brought. It was originally discovered by Signor D'Albertis during his expedition on the Fly River, in New Guinea.

Bearing a strong family resemblance to the well-known King Parrot of Australia, it is still more brilliant, with the upper parts of a rich lazuline blue, instead of green, and a broad patch of vivid grass-green on the shoulders. It is probable that the female is as vividly coloured as the male, for Mr. Goodfellow often saw them in pairs, and the two birds were always similar.

A small pair of Parrots would seem to be *Cyclopsitta diophthalma*, the Double-eyed Parrakeet, but I may be mistaken. It is a little short-tailed parrot, *rather* larger than a Peach-faced Love-Bird, having a body which is chiefly grass green ; red forehead, crown, and cheeks, and a brilliant spot of verdigris green over the eyes towards the bill, from which it derives its name. The flanks are edged with yellow along the outside of the shoulders. The bill is strongly formed, after the manner of a Cockatoo.

I should think that these little parrots would probably breed in captivity without much ado. They, along with others that I have written of, are *great* rarities in the avicultural world. Still choicer, had they been brought alive, which alas ! they were not, are the Pygmy Parrots (*Nasiternæ*).

Mr. Goodfellow had twelve of these delicious little birds, but was forced to let them go owing to a failure in the supply of seed.

There are nine known species of this family, but Mr. Goodfellow had procured the most beautiful of them all, namely, Brujn's Pygmy Parrot (*Nasiterna bruyni*). It is no exaggeration

to say that these little Short-tailed Parrots, with bills à la Cockatoo, are no larger than Long-tailed Titmice in the body. They are real midgets, and I could have wept freely and loudly when I was shown the skins of a pair, after having had every hope of seeing them alive, and even of possessing them !!

In their wild state, they nest quite low down, either in a hollow tree or in an ant's nest, and from one of these a native brought in one night a whole family comprising the two parent birds with their five young ones, having heard them squeaking as he passed in the forest.

For many years I have longed for Pygmy Parrots, neither do I yet give up hope.

Two beautiful GREEN BULBULS are in this collection; the one the size of a Lark, the other somewhat smaller. Slenderly built, and of a soft yet brilliant emerald grass-green, they are certainly by no means the least lovely. They count for a great deal "among so many."

Both are believed to be females; indeed Mr. Goodfellow knows the male of the larger one, at any rate, which he describes as being more brilliantly coloured than the female. They are very tame birds indeed, and would make charming pets, and create a furore on the show bench.

Then there is a wonderful DRONGO-SHRIKE, which, along with the Green Bulbuls, came from Java. This bird's colouring is a mysterious dark greenish bronze, with a burnished sheen upon the plumage, a velvety black mask to the face, and brilliant eyes of blue.

Another specimen of DUMONT'S GRACKLE (*Mino dumonti*) is included; a bird which can be taught to speak extremely well.

There are three pairs of the fine WHITE-THROATED PIGEON (*Ianthænas albigularis*). They are of the size and style of a British Woodpigeon, grain-eaters, their colour is slaty grey, their wings are edged with green, the heads and breasts are pinkish-lilac, and their throats are white, which shows in a conspicuous patch against the rest of the plumage.

Three birds at once attracted one's attention amongst this galaxy of rarities and beauty.

Two males and one female of *Irena cyanea*, the Malayan

FAIRY BLUE BIRD. They are related to the Bulbuls. In size they may be compared to a *rather* large British Starling. In colour, speaking sketchily, the male has the upper parts of a gorgeous Turquoise blue which shines like satin, inclining to silvery cobalt on the head, while the underparts and wings are rich velvety black, and the eyes scarlet.

The female is a duller powdered blue green all over. A pair of these treasures I carried home.

Finally there are three pairs of THREE-COLOURED PARROT-FINCHES (*Erythrura trichroa*). Their colouring is a rich green, with faces of cobalt blue; their rumps and tails (which are pointed) are dull red. A great many might have been caught, had the seed supply not been exhausted.

I may add that Mrs. Johnstone benefits her avicultural friends by allowing them to purchase of her any birds which she may not have room for. Most certainly all bird-lovers will be grateful to her for giving them this opportunity, and to Mr. Goodfellow for his zeal and perseverance in bringing to England such rarities as have been safely deposited in Mrs. Johnstone's aviaries at Burrswood.

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## NESTING OF THE PARTRIDGE BRONZEWING PIGEON.

*Geophaps scripta.*

By T. H. NEWMAN, F.Z.S., M.B.O.U.

The interesting notes on the Squatter Pigeons by our Editor, which appeared in our August magazine of last year, will be fresh in the minds of all. At the time that paper appeared the birds had already passed into my possession, as they came to me on July 5th, 1907. Needless to say how pleased I was to obtain these most interesting and rare birds through our Editor's kindness. I would advise all to read his paper before this article, as I propose to follow up the history of the pair of Partridge Pigeons. They have nested freely this summer, and I hope my notes, made during the rearing of the young, may be the means of clearing up some of the mystery which has hung round the nestling of the genus *Geophaps*, for apparently the

young of no other pigeons have excited so much difference of opinion, and the statements that the young "are hatched clothed with down, like a young Quail," and that they "fly strongly when they are only as large as a Quail" have led to the belief that these birds, which so wonderfully assimilate a Partridge in appearance and habits, are really more Partridge than Pigeon. It would be hard to find another case among birds of one group approaching another so closely in superficial details as the genus *Geophaps* does the Partridges. Yet in no point do they really differ from the more typical Pigeons. As the excellent photograph given in August 1907 shows, the bird closely resembles a Gallinaceous bird in build. They run with the ease and elegance of a pea-chick, the white band on each side of the breast also adds to the resemblance; they have a habit of raising themselves on tip-toe and giving their wings a vigorous flap, in a way that one almost expects them to give a crow, and I have noticed a Partridge-like habit of roosting in a group, their heads pointing in different directions, their tails coming closely together in the centre. The old birds are seldom far apart, and seem much attached to one another, though they seldom indulge in the caresses which most Pigeons so often do. They seem to keep up a running conversation in a low "crooning" tone, as our Editor has so well expressed it; this doubtless serves to keep the birds in touch when wandering about the bush. When the male meets the female he often seems to go through a kind of show-off, nodding his head and raising the feathers on his head and back, and frequently salutes her with the coo proper, which is generally a thrice repeated hurried coo, each accompanied by the usual elevation of tail and wings. The birds are strictly terrestrial, but are fond of perching on a stump or thick branch, once or twice I have seen them perched on the small twigs of a bush, but this is probably an acquired accomplishment. They never dust like gallinaceous birds, and I have never seen them bathe, they will lie on their side with one wing raised during a shower, like other Pigeons; they are very peaceful and never fight, though one day I noticed one defending itself against the attacks of a cock Picni dove, which was flying furiously round its head, the reason being that the Picui had had two young ones leave the nest on

that day, and I suppose he thought the big "Partridge" might do them harm. My pair are quite tame, and altogether charming birds in all ways.

The young birds are much wilder, they always I think roost on the sand, either in the inner house or under the glass shelter of their aviary. I will first quote Campbell in his "Nests and Eggs of Australian Birds," as he tells us all that is known of the nesting of this bird in the wild state. On page 690 he writes: "Professor Alfred Newton, Cambridge, has drawn my attention to the statement made by Gould that 'the young both run and fly strongly when they are only as large as a Quail, as I satisfactorily ascertained by killing one which rose before me; but at which bird I had fired I had not the slightest conception until I picked it up.' Gould's statement is somewhat ambiguous and unsatisfactory, to say the least of it, and it is with very great diffidence I have to qualify the statement of such an eminent authority. It would indeed be remarkable were one of the Pigeon tribe, after coming into down, to fly before fully feathered. I wrote to the Messrs. Barnard for their field observations on the subject. The following is Mr. Charles Barnard's reply: 'I have noticed the passage in Gould *re* young Pigeons that you refer to. I have seen them fly when only the size of a *large* Quail, but any person could see it was the weak, uncertain flight of a young bird, and when they alight they will allow themselves to be picked up without attempting to escape. I do not think they leave the nest until they are able to fly.' Mr. Harry Barnard writes: 'The young Squatter Pigeons remain about a fortnight in the nest till they can fly short distances; but they are easily caught for some time after leaving the nest, as their flight is very weak.' Further, Mr. Charles was good enough to forward to me in spirits a pair of these young Pigeons about a week old, taken from the nest. Judging from their unfeathered wings, it would have been impossible for them to 'fly strongly' at such an early age. Here is Mr. Barnard's own memo. which accompanied the specimen: 'The young Pigeons were just about a week old when I bottled them, the eggs were last seen on Monday afternoon, 30th March (1896) and I bottled the young early the following Monday.'

“There is another slight inaccuracy in Gould’s notes. He states that the eggs are laid on the bare ground ‘without any nest.’ It may be true in some instances, but the Messrs. Barnard inform me they have frequently disturbed a pair of birds scratching out their little nesting hollow, which they line with soft, dry grass. The Partridge Pigeon breeds at almost any period of the year, but usually from September or October to well into the autumn, the majority, perhaps, laying in January.”

The interest of the subject, and the way in which it agrees with my notes, must be my excuse for quoting so fully from such a well-known work.

During the latter part of last year, the cock bird of my pair would frequently sit by a tall tuft of grass, the leaves hanging over and forming a shelter, uttering a low note to call the hen, but no serious attempt was made to nest. In April 1908 the birds became anxious to nest, and on the 24th of that month I found an egg with a hole at one end under an ivy branch, which is planted just outside the glass shelter. The ivy leaves nearly concealed the nest. A small willow grows above the ivy, and long grass surrounds the roots of the plants, the actual nest being between the ivy root and a board, which forms the base of the division from the next compartment of the aviary. No nest seemed to be made, but some of the long grass was beaten down, and formed a slight protection from the bare earth. A second egg was laid on the 26th: the birds did not sit. This second egg was put under some other doves, but it disappeared.

The eggs, of which I have three examples before me, are small for the size of the bird, being scarcely larger than those of the Barbary Dove. In colour they are a pale cream, not so strongly tinted as those of *Lophophaps*; in shape they are rather rounded ovals, slightly more pointed at the smaller end, and are smooth, possessing a considerable gloss.

I was away during the early part of May and, when I returned, the birds were sitting on two eggs, only a few inches from the spot chosen at first. I placed a glass shutter leaning against the partition so as to protect the nest from rain, etc. When they had been sitting for over a fortnight, I thought the eggs were no good and gave them a shake, when I was horrified



to hear sundry audible squeaks from them, so I hastily replaced them. The birds sit very closely. When the nest is disturbed the sitting bird puffs out its feathers and utters low grunts, and when the hand is put near the cock strikes out strongly with his wing, the hen is not so fierce. If driven from the nest the bird will pretend to be seriously hurt, first one wing and then the other will be stretched out and quivered. On the 23rd May one young one was hatched, the other egg contained a nearly full-sized dead chick. This is my note made the same day: "Young covered well with rather dark fawn down, but not more so than many other doves, bill dark brown, almost black on edges of mandibles, a white knob on *both* mandibles at tip, tip of bill very pale grey, feet greyish pink." A later note from another young one adds "the down is paler (pale yellow) on under surface," and that there is "a bare line down breast and abdomen." The two points of interest to be noted are (one) that the young is no more clothed with down like a young Quail than many other species of Pigeons. Here is a note made 11. 8. 08. "The two young hatched on August 8th are still perfectly helpless, and differ in no way from the young of other Pigeons; on comparison with a young Deceptive Dove (*Turtur decipiens*) one day old, the latter has quite as much down, but of a bright yellow colour, while it is dark fawn in the former, though the Deceptive was only about half the size it had a bill quite as long but thinner the chief difference in shape lay in the head, the Partridges had a very round one with a comparatively short thick bill, the quill and scapular feathers were beginning to sprout. The smaller of the two young had both eyes, and the other one eye, half open; they uttered a soft chirping note when touched." And (two) the presence of an egg tooth on both mandibles, the upper one is of the usual triangular shape, but unusually large while the lower one takes the form of a flattened semi-circular nail. I am not aware that an egg tooth on the lower jaw has been recorded in any species of bird, but it is evidently not so uncommon among Pigeons, as I found it present in the newly-hatched young of the Brush Bronze-wing (*Phaps elegans*), but very much smaller, and, to my surprise I could just detect it in two young Picni Doves (*Columbula picui*), and in a young Diamond Dove (*Geopelia*

*cuneata*). I think we shall hear more about this later on, as I have sent a two days old young Partridge Bronze-wing to Mr. Pycraft, and he has promised to describe it to us. It would be interesting if our members would examine any young doves or pigeons that they may have hatched and report if they find it present; I think the young of *Columba* and *Turtur* have no trace of it.

To return to the history of the young one hatched on May 23rd, I was away the end of May and beginning of June, but was told the young one was first noticed out of the nest on June 4th, when it would be about twelve days old. It could run quite fast, as I am informed it gave much trouble to catch in order to be replaced in the nest at night, it was always out again in the morning. I have no notes of the early stages of this bird, but later ones will supplement those on the second young one, so I will give them later on. On June 7th and 9th the old birds laid again in the same nest, from which the first young had only run, I can't say flown, two or three days before. During incubation the eldest young one would sometimes sit by its sitting parent. On June 26th another young one was hatched. Duration of incubation seventeen days. On June 30th its eyes were opening and feathers beginning to sprout, body sparingly covered with fawn coloured down. (A young pigeon a few days old does not seem nearly so well clothed as at birth, owing to the growth of the body, the down also fades). July 5th it first left the nest, being nine days old. I found it about a yard away; its wings, top of head, crop and back were now fairly fledged. I put it back in the nest. On July 7th the young one did not stay in the nest any more, but ran about quite actively after its parents, wings well fledged and a band of feathers along top of head, which were raised when the bird ran, sides of upper surface of head bare. The white face markings just beginning to show in quill feathers on each side of ear. It was about the size of a Picui Dove, ran quite fast, it recognised its parents at some distance off, ran to them, uttering a sort of chirping whistle, and nestled under the old bird like a chick. July 9th the white feathers on face coming. July 10th, saw old bird feed young for first time, then they went to the end of the flight, and I was

surprised to see the old bird feed both the young ones at once. No. 1 being then nearly seven weeks old. As this seems to be a rather interesting fact, I may mention that on all the occasions when I saw the younger one fed, the elder one always had its share; the last time I noticed this being on July 29th. No. 1 then being between nine and ten weeks old and hardly inferior to its parents in size. I cannot say too much for the remarkable amiability of this species, most Pigeons cast off the first brood as soon as a second one arrives. I have even seen young badly pecked by their parents, but the "Partridges" seem to live on perfectly friendly terms with the young of any number of broods. At the time of writing (24. 8. 08) the parents seem perfectly friendly with both the two first young, though there are two younger ones which have just left the nest, all six roosting in a group together.

*(To be continued).*

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## NOTES ON BREEDING THE COMMON BLACK FRANCOLIN.

*Francolinus vulgaris.*

I am told that the hens of this species are very seldom imported. The cocks, I believe, very often pass as "painted Francolins."

A friend sent me several birds of both sexes from India early last spring but only one pair survived. I placed this pair in an open grass run (about 8yds. by 6yds.) partly planted with broom, laurels, etc., and already occupied by three Amherst Pheasants and one Rock Partridge.

The Francolins very soon settled down and fed fearlessly on meal, corn, or almost anything that was given to the pheasants. The cock Francolin during April and May was incessant, morning and evening, with his repeated cry "Kek-i-kek-i-kek" always stopping in his walk and throwing his head back and opening his bill very wide when making his note, as though his voice were several sizes too large for him. It is a question to my mind whether this bird may not have been used in India as a call-bird.

I did not expect the birds to breed and the first signs we had of pairing were about the end of May when my man remarked with amusement (pointing to the Amherst cock, rather a fierce old bird) "That little chap do run him about." It was quite true. The fierce little Francolin had turned the Amherst into a regular coward and made him live in a state of terror.

On the 11th June the first Francolin egg was laid, the nest being merely a hollow lined with dead grass under a laurel bush—indeed it was an old nest of the Amherst Pheasants. The egg was stone coloured and pointed at the smaller end. Three more eggs were laid at intervals of two days and then, as the Francolin ceased laying and appeared to have no desire to sit, the four eggs were put under a reliable bantam on the 20th June. One chick appeared on the 9th July and was left in the nest until the following morning when all the other eggs were found hatched.

The four chicks were fed on hard boiled eggs, Armitage's Alpha Pheasant Food, chopped lettuce, fresh ants' eggs, and as many live earwigs, beetles, etc., as could be obtained.

The bantam and chicks were placed on short turf in a coop, with little run attached. and constantly moved on to fresh ground.

The chicks were very lively in movement from the first, dashing about after beetles, etc., with great rapidity and always seeming on the alert. They all made a curious little chirping sound hardly to be distinguished from that of a cricket. They grew rapidly and their feathers came well.

Within a fortnight the chicks took seeds freely though showing a strong preference for living insects and lettuce. I then turned them with the hen into a small grass run where they had plenty of room to search for insects, etc., amongst the tufts of grass.

When hatched the down of the chicks was brown and all had a brown (almost black) line along the top of the head from the bill to the back of the neck.

By the beginning of August the chicks had got feathered except on their heads—the feathers being brown with black bands and gradually growing darker with age except on the

breast where they grew lighter. Three out of the four chicks at this time showed a good deal of white on the wing feathers—the chick that was first hatched was not showing any white. I am afraid that three at least of the chicks will prove to be cocks.

About the middle of August the birds were put into a still larger grass run, the insect food gradually discontinued and the bantam hen removed.

I am well aware that my method of rearing is “amateurish,” and might be greatly improved, but when I look at the four little Francolins in perfect health I am tempted to say with the gentleman in the play “I may be an ass, but I am not a silly ass.”

In conclusion I may mention that all my aviaries are on dry gravel soil which for almost all game birds is a great advantage.

C. BARNBY SMITH.

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## NOTES ON THE BREEDING OF THE YPECAHA RAIL.

*Aramides ypecaha.*

By GERARD H. GURNEY, F.Z.S.

In June, 1907, I received a pair of Ypecaha Rails (*Aramides ypecaha*) which had recently come from Brazil, and which I put into a large outdoor aviary, where they have been ever since, standing the cold of last winter remarkably well.

At the beginning of June this year, 1908, my man noticed the commencement of a nest, which I at once thought must have been made by the Rails. It was built in the middle of a gooseberry bush, about two feet from the ground, and looked very much like a Dove's nest, being made of thin sticks, one or two leaves, and some bits of grass being put inside by way of a lining. It was completed by about June 16th.

The first egg was laid on June 18th, the second on the 19th, and by June 22nd all four eggs were laid; they are about the size of an ordinary Coot's egg, and in colour like a Corncrake's, but handsomer, with beautiful pinkish spots and markings. I was away from home all the time the old birds were sitting, so do

not know what took place, but my man tells me both birds were exceptionally shy and retiring during this time, and seldom showed themselves ; on July 4th, on looking into the nest, he found one of the eggs was on the point of hatching, the egg was chipped and he could hear the young bird cheeping inside it ; three of the eggs hatched and the fourth was rotten ; apparently two of the eggs hatched a little time before the third, as on July 6th, on going into the cage, two young Rails, evidently a day or two old, were found lying dead under a tree at the far end of the aviary, and the third, and only living one, lying just hatched in the nest, and it looks to me as though the two young birds which had hatched first, had got out of the nest and perished, probably from want of attention. The little Rails when first hatched very much resemble a baby Water hen, and are covered with black down on the body, the head and neck being quite light brown colour, legs and beak black.

I was again away from home for a week or two after they had hatched and on returning found the young Rail had grown into a very fine strong young bird, with feathers beginning to show all over it, and the commencement of a funny little stumpy tail which it was always jerking about when it walked ; it still appeared to be black all over and its legs looked very long and out of proportion to the rest of its body ; now, on August 16th, it is full grown and beginning to look quite olive green on the back ; it is tamer than the old birds ; does not slink into cover directly one approaches, and is very fond of wading about the little water pool in the aviary and probing in the grass with its bill : if alarmed it will run behind a stump, looking out first from one side and then from the other, generally standing on one leg. Its parents seem to pay it no attention at all and keep quite to themselves, and the young Rail generally seems to prefer the company of a Knot and an Australian Plover, and on one occasion I saw it feeding, very complacently, out of the same dish as a Himalayan Jay was pecking from.

I shall be very glad to hear if any one knows whether the Ypecaha Rail has been bred before in captivity.

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## NOTICES OF NEW BOOKS, ETC.

## USEFUL BIRDS OF SOUTHERN AUSTRALIA.\*

On the whole, perhaps, the average Australian displays even more ignorance of the habits of the birds of his country than does his brother in the Mother-land. He knows, for instance, that the White-eyes (*Zosterops*) which are at times very numerous in his orchards, occasionally help themselves to his fruit, especially his figs, and he proceeds to kill every one he can, forgetting that at most times of the year these little birds feed entirely upon insects and rid his trees of enormous quantities of these pests. In the little book before us Mr. Robert Hall, one of the foremost of Australian Ornithologists, has endeavoured to point out to his fellow countrymen the good points as well as the bad, in the birds which are met with in Southern Australia; and with the aid of this useful handbook all ignorance on the subject should be dispelled. The book is interesting and instructive, and is well illustrated.

## CORRESPONDENCE, NOTES, ETC.

## "THE BRITISH RAILS."

SIR,—In the last number of our Magazine there is a paper on British Rails by Mr. P. W. Farmborough, in which he treats of "the Water Rails." I cannot help thinking that in using this name, he does so in a pluriel sense for most of his remarks seem to me entirely applicable to the Moorhen (*Gallinula chloropus*) and not to the Water Rail (*Rallus aquaticus*) at all. If this is so it is a pity, I think, that it is not made clear in the paper.

My special reason for drawing attention to the matter in the writer's remarks on p. 304 where he says that on July 18th he saw two or more (and in one instance no less than seven Water Rails) in nearly every field in the immediate proximity of water, while on a railway journey through Kent. Now if these birds were the common Moorhen, there is nothing remarkable about it, and it is so utterly unlike the skulking habits of the Water Rail to wander about in even two's and three's in open fields by the side of a railway that I cannot but think that Mr. Farmborough's Water Rails are really Moorhens.

\**The Useful Birds of Southern Australia*, with Notes on other Birds, By ROBERT HALL F.L.S., C.M.Z.S. T. C. LOTHIAN, Melbourne and Sydney, 1907.

I should like to think that the Water Rail was really as common in Kent in summer as his remarks would lead one to believe, for if so, it must breed there, conclusive evidence of which I have been seeking in vain for years.

N. F. TICEHURST.

#### THE WHITE-EYEBROWED WOODSWALLOW.

Mr. HENRY SCHERREN writes:—"Looking over some old Reports of the Zoological Society, I came on the entry of *Artamus superciliosus*, among birds bred at the Gardens in 1870." Later he writes: "I was at Hanover Square to-day and Miss Schneider kindly looked over the death book. They were hatched on July 2nd, 1870; one lived until August 5th, 1870, the other we could not trace. It may have escaped or been exchanged or given away."

#### CURASSOWS BREEDING AT THE ZOOLOGICAL GARDENS.

In 1906 a female Heck's Curassow (*Crax hecki*) paired with male Globose (*C. globicera*), nested and hatched one young bird in the large flying aviary opposite the Eastern Aviary. This unfortunately was not reared. For some reason the birds were left in the Eastern Aviary the following year, where they had no chance of nesting.

This year the pair was put into the Pheasantry on the North bank, where the hen hatched out two chicks about the middle of August, which so far are doing very well, the nest having been built in the shelter at the back of the aviary. For the first few days the young birds took their food from the bill of their parent, though they very soon learned to pick for themselves. We hope to publish a full account next month.

#### THE SOCIETY'S MEDAL.

Medals have been awarded to Mr. C. Barnby Smith and Mrs. C. H. Williams for having successfully reared young of the Partridge Tinamou (*Nothoprocta perdicaria*) and the Brown-throated Couure (*Conurus æruginosus*) respectively. The Committee much regret that they cannot present a medal also to Mr. Brook for breeding the White-eyebrowed Wood-Swallow, this species having been successfully bred in the London Zoo in 1870.

[*Post Mortem* Examination Reports received too late for insertion].



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One pair Hunstein's Magnificent Bird of Paradise (*D. hunsteini*), cock in full plumage, both in perfect health, £40; 1 pair Stella's Lory (*Charmosyna stellæ*) in beautiful plumage and condition, £15.

WALTER GOODFELLOW; Montrose, New Park Road, West Southbourne.

Sound acclimatized specimens:—Hen Blue-bonnet Parrakeet; cock Rufous-necked Weaver; cock Ruddy Bunting (*E. rutila*); Budgerigars, home-bred, Cockatiels, Parson-finches, &c., all at reasonable prices. Able to supply on occasions British and foreign birds, of many kinds.

ALLEN SILVER; 11, Foulser Road, Upper Tooting, S.W.

A beautiful pair of young Blue-headed or Red-vented Parrots (*Pionus menstruus*), just moulted into full plumage, £5; also a number of various Troupials and Tanagers for disposal. Particulars, &c., from

W. FROST; 13, Westcroft Square, Ravenscourt Park, London, W.

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##### WANTS.

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PAYNE & WALLACE, Bath.

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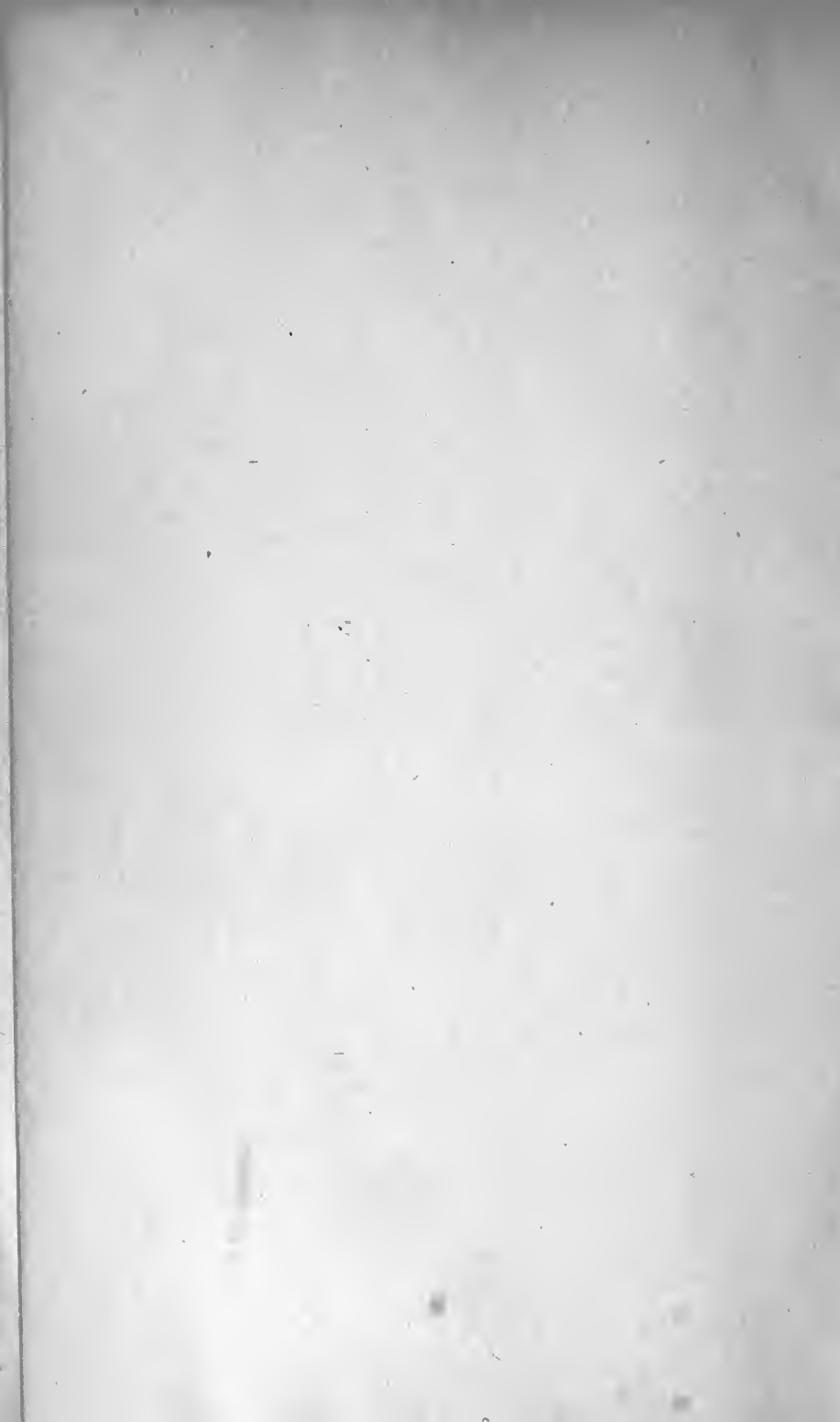
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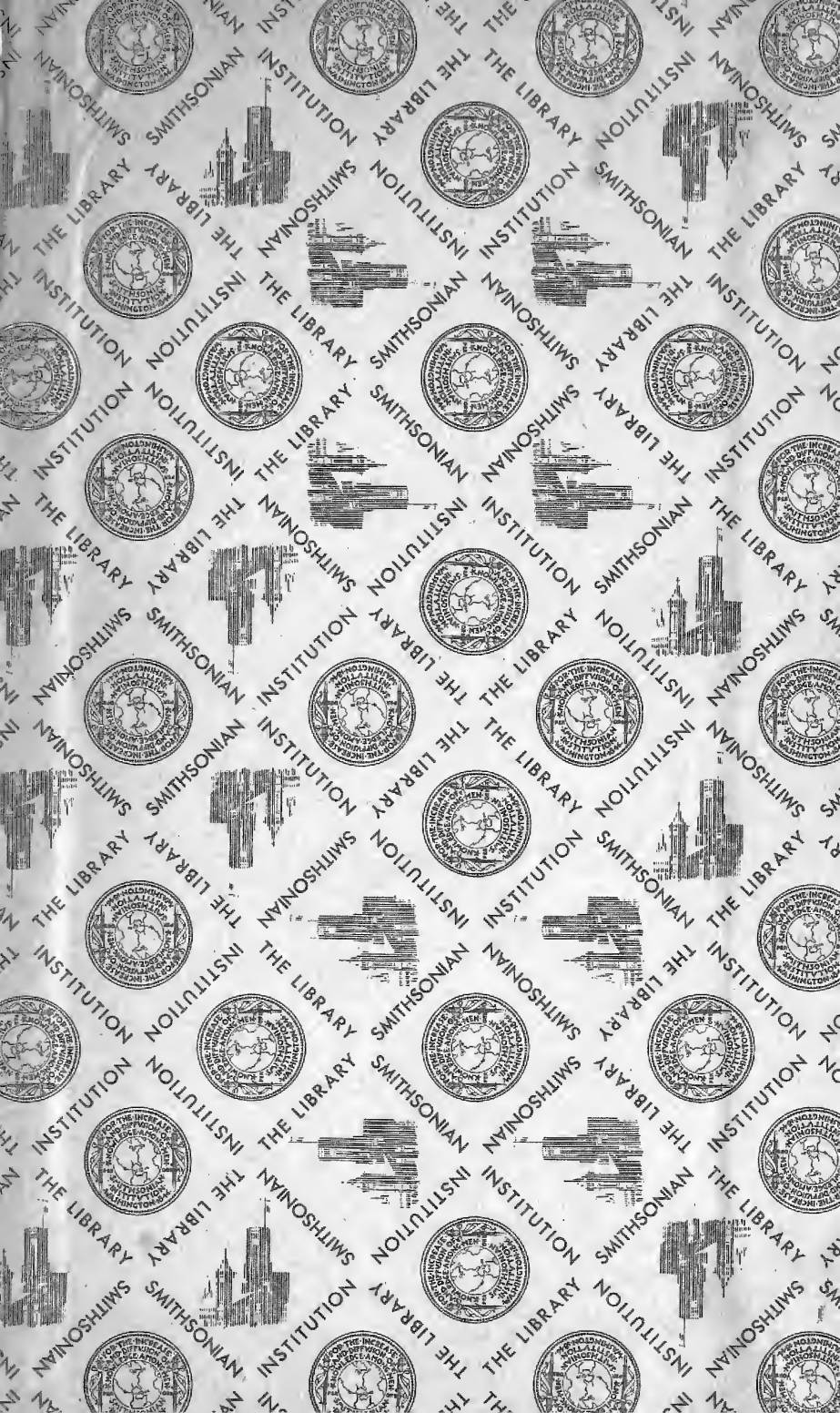












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